NAVAL POSTGRADUATE SCHOOL
Monterey, California

THESIS

JOB SATISFACTION AND RACE AMONG MILITARY ENLISTEES

by

Ignatius Manggolo

June 1987

Thesis Advisors: Loren M. Solnick
George W. Thomas

Approved for public release; distribution is unlimited.

UNCLASSIFIED
SECURITY CLASSIFICATION OF THIS PAGE

REPORT DOCUMENTATION PAGE

1a REPORT SECURITY CLASSIFICATION UNCLASSIFIED	1b RESTRICTIVE MARKINGS
2a SECURITY CLASSIFICATION AUTHORITY	3 DISTRIBUTION / AVAILABILITY OF REPORT Approved for public release; distribution is unlimited.
2b DECLASSIFICATION / DOWNGRADING SCHEDULE	
4 PERFORMING ORGANIZATION REPORT NUMBER(S)	5 MONITORING ORGANIZATION REPORT NUMBER(S)
6a NAME OF PERFORMING ORGANIZATION Naval Postgraduate School 6b OFFICE SYMBOL (If applicable) Code 54	7a NAME OF MONITORING ORGANIZATION Naval Postgraduate School
6c ADDRESS (City, State, and ZIP Code) Monterey, California 93943-5000	7b ADDRESS (City, State, and ZIP Code) Monterey, California 93943-5000
8a NAME OF FUNDING / SPONSORING ORGANIZATION 8b OFFICE SYMBOL (If applicable)	9 PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER
8c ADDRESS (City, State, and ZIP Code)	10 SOURCE OF FUNDING NUMBERS PROGRAM ELEMENT NO / PROJECT NO / TASK NO / WORK UNIT ACCESSION NO

11 TITLE (Include Security Classification)
JOB SATISFACTION AND RACE AMONG MILITARY ENLISTEES

12 PERSONAL AUTHOR(S)
Manggolo, Ignatius

13a TYPE OF REPORT	13b TIME COVERED	14 DATE OF REPORT (Year, Month, Day)	15 PAGE COUNT
Master's Thesis	FROM _____ TO _____	1987 June	68

16 SUPPLEMENTARY NOTATION

17 COSATI CODES			18 SUBJECT TERMS (Continue on reverse if necessary and identify by block number)
FIELD	GROUP	SUB-GROUP	Military Enlistees, 1985 DoD Survey of Officer and Enlisted Personnel, Job satisfaction, Regression Analysis

19 ABSTRACT (Continue on reverse if necessary and identify by block number)

This thesis investigated the relationship of race to job satisfaction by examining factors considered to be determinants of job satisfaction among military enlistees. The data used in this research was the 1985 DoD Survey of Officer and Enlisted Personnel, conducted for the Office of the Assistant Secretary of Defense by the Defense Manpower Data Center. The study analyzed black, hispanic and white enlistees in all four branches of service. Bivariate analysis, factor analysis and regression analysis was performed to determine the effect of race on those factors considered to be determinants of job satisfaction. The results of the analysis indicated that race was a significant effect on the determination of job satisfaction. An understanding of the effect of race to factors that determine individual's satisfaction will give military policymakers greater opportunities for control over behaviors such as enlistment and retention.

20 DISTRIBUTION / AVAILABILITY OF ABSTRACT	21 ABSTRACT SECURITY CLASSIFICATION	
☒ UNCLASSIFIED/UNLIMITED ☐ SAME AS RPT ☐ DTIC USERS	Unclassified	
22a NAME OF RESPONSIBLE INDIVIDUAL Professors Loren M. Solnick/George W. Thomas	22b TELEPHONE (Include Area Code) 408-646-2249/2741	22c OFFICE SYMBOL Codes 54Sb/54Te

DD FORM 1473, 84 MAR 83 APR edition may be used until exhausted
All other editions are obsolete

SECURITY CLASSIFICATION OF THIS PAGE
UNCLASSIFIED

Approved for public release; distribution is unlimited.

Job Satisfaction And Race Among Military Enlistees

by

Ignatius Manggolo
Commander, Indonesian Navy
B.S., Indonesian Naval Electronics School, 1967

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
June 1987

ABSTRACT

This thesis investigated the relationship of race to job satisfaction by examining factors considered to be determinants of job satisfaction among military enlistees. The data used in this research was the 1985 DoD Survey of Officer and Enlisted Personnel, conducted for the Office of the Assistant Secretary of Defense by the Defense Manpower Data Center. The study analyzed black, hispanic and white enlistees in all four branches of service. Bivariate analysis, factor analysis and regression analysis was performed to determine the effect of race on those factors considered to be determinants of job satisfaction. The results of the analysis indicated that race was a significant effect on the determination of job satisfaction. An understanding of the effect of race to factors that determine individual's satisfaction will give military policy-makers greater opportunities for control over behaviors such as enlistment and retention.

TABLE OF CONTENTS

I. INTRODUCTION AND LITERATURE REVIEW 10

A. INTRODUCTION 10

B. LITERATURE REVIEW 10

1. Theories of Job Satisfaction 10

2. The Measurement of job satisfaction 13

3. Relationship between job satisfaction and life satisfaction 14

4. Relationship between job satisfaction and turnover 17

5. Relationship between job satisfaction and personal variables 19

6. Relationship between job satisfaction and individual characteristics 21

7. Relationship between job satisfaction and working conditions 22

8. Relationship between job satisfaction and expectations 22

II. DATA AND METHODOLOGY 24

A. DATA 24

B. CAUSAL MODEL, FACTOR CATEGORIES, AND CANDIDATE VARIABLES. 25

1. Causal model and factor categories 25

2. Candidate explanatory variables 26

C. METHODOLOGY 27

1. Prepare data for analysis 27

2. Bivariate Analysis 28

3. Factor Analysis 28

4. Regression Analysis 29

III. ANALYSIS 30

A. BIVARIATE ANALYSIS 30

1. Analysis the results 30
2. Summary of the results 34
B. FACTOR ANALYSIS 36
1. Satisfaction with working conditions 36
2. Satisfaction with living environments 38
C. REGRESSION ANALYSIS 40
1. The most important variables in affecting job satisfaction 42
2. The less important variables on determining job satisfaction. 43
3. Test involving the equality of coefficient of the models 45

IV. CONCLUSIONS AND RECOMMENDATIONS 47
A. CONCLUSIONS 47
B. RECOMMENDATIONS 47

APPENDIX A: THE REGRESSION RESULTS FOR ALL RACES AND BRANCHES OF SERVICE 49

APPENDIX B: THE REGRESSION RESULTS FOR THE BLACKS 50

APPENDIX C: THE REGRESSION RESULT FOR NON-BLACKS 51

APPENDIX D: THE REGRESSION RESULTS FOR THE HISPANICS 52

APPENDIX E: REGRESSION RESULT FOR NON-HISPANICS 53

APPENDIX F: THE REGRESSION RESULTS FOR THE WHITES 54

APPENDIX G: REGRESSION RESULT FOR NON-WHITES 55

APPENDIX H: REGRESSION RESULT FOR ARMY 56

APPENDIX I: THE REGRESSION RESULTS FOR NON ARMY 57

APPENDIX J: THE REGRESSION RESULTS FOR THE NAVY 58

APPENDIX K: THE REGRESSION RESULTS FOR NON-NAVY 59

APPENDIX L: THE REGRESSION RESULT FOR MARINE 60

APPENDIX M: THE REGRESSION RESULTS FOR NON-MARINE 61

APPENDIX N: THE REGRESSION RESULTS FOR THE AIR FORCE 62

APPENDIX O: THE REGRESSION RESULTS FOR NON-AIR FORCE 63

LIST OF REFERENCES 64

INITIAL DISTRIBUTION LIST 67

LIST OF TABLES

1. SATISFACTION WITH MILITARY LIFE BY RACE 30
2. PERSONAL BACKGROUND AND INDIVIDUAL CHARACTERISTIC BY RACE 31
3. SATISFACTION WITH WORKING CONDITIONS BY RACE 33
4. FEELING ABOUT LIVING ENVIRONMENTS BY RACE 34
5. MILITARY LIFE AS EXPECTED BY RACE 35
6. FACTOR SCORE OF WORKING CONDITIONS FOR BLACK MALE ENLISTEES 37
7. FACTOR SCORE OF WORKING CONDITIONS FOR HISP. MALE ENLISTEES 37
8. FACTOR SCORE OF WORKING CONDITIONS FOR WHITE MALE ENLISTEES 38
9. FACTOR SCORE OF LIVING ENVIRONMENTS FOR BLACK MALE ENLISTEES 39
10. FACTOR SCORE OF LIVING ENVIRONMENTS FOR HISP. MALE ENLISTEES 39
11. FACTOR SCORE OF LIVING ENVIRONMENTS FOR WHITE MALE ENLISTEES 40
12. REGRESSION ANALYSIS RESULTS BY RACE 41
13. REGRESSION ANALYSIS RESULTS BY BRANCH OF SERVICE 42
14. THE RESULTS OF THE CHOW TEST 46

LIST OF FIGURES

1.1 Structural model of the determinants of Job and Life satisfaction 16

1.2 A Representation of the Employee Turnover Process 18

2.1 Relationship between life satisfaction and factors considered to be determinant of satisfaction with military life. 25

2.2 Satisfaction With Military Life's Regression Equation 29

ACKNOWLEDGEMENTS

I am very grateful to numerous people for assisting in the completion of this thesis. Most of all, I would like to express my appreciation to my co-thesis advisors, professor George W. Thomas, professor Loren M. Solnick and their assistant Helen M. Davis for their enthusiastic guidance and support. Without many hours of their coaching and encouragement, this thesis could not have been completed.

I am also very grateful to Kathy Kocher, Alvin Jones and Jay Steele for their help, and finally, I extend my sincere thanks to my wife Agatha Wayan Manggolo, my sons Alberthus Ade Manggolo and Anthonius Oka Manggolo. Without their constant support and encouragement, this thesis would have never been completed.

I. INTRODUCTION AND LITERATURE REVIEW

A. INTRODUCTION

Like any feeling of satisfaction, job satisfaction is an emotional, affective response. Affect refers to feelings of liking or disliking. Therefore, job satisfaction is the extent to which a person derives pleasures from a job. Locke (1976) defines it as "a pleasurable or positive state resulting from the appraisal of one's job or job experiences". This is known as global job satisfaction, and it reflects a general feeling. Psychologists realized that people can feel differently about various aspects of a job, and these feelings are masked by assessing only global satisfaction. This led to examining job facet satisfaction, and involves measuring how people feel about various parts of a job. [Ref. 2: p. 320]

The cost of training new personnel, the need to satisfy accession goals, and the fact that the military is a closed labor market where members enter at the lowest rank, is forcing the military to consider the importance of minority job satisfaction in the formulation of policies and plans for the future. An understanding of the elements that determine an individual's satisfaction will give military policy-makers greater ability to influence behaviors such as enlistment and retention.

This thesis will attempt to determine the relationship of race to job satisfaction, by examining the effect of race on those factors considered to be determinants of job satisfaction among military enlistes. One of the main purposes in determining the differences in job satisfaction by race is that minorities have increased their representation in the general population, and also, they have increased their representation in the military. The second purposes is based on the assumption that turnover is a function of job satisfaction. This assumption is well supported by the literature on job satisfaction and turnover. [Ref. 5: p. 122-126]

B. LITERATURE REVIEW

1. Theories of Job Satisfaction

Several theories have been proposed to explain why people are satisfied with their job. None of the theories have gained a great deal of empirical confirmation, which suggests that job satisfaction is a complex phenomenon with many causal bases and that no one theory to date has been successful in incorporating all of the bases

into a single theory. [Ref. 3: p. 309] There are several different approaches to job satisfaction, such as

a. Comparison Processes

Comparison process theories are based on the extent to which a job is perceived to meet a person's needs or values. According to McCormick and Ilgen (1980), "the most widely accepted view of job satisfaction assumes that the degree of affect experienced (by a person) results from some comparison between the individual's standard and the individual's perception of the extent to which the standard is met". Degree of satisfaction is the difference between the standard and what is received from the job. Comparison process theories compare what a person wants (the standard) with what he or she receives. The less the difference, the greater the feeling of satisfaction. [Ref. 4: p. 22]

The standard and how it is derived must be defined. Some researchers believe the standard consists of human needs. Needs are inborn, and it is believed that everyone has the same basic needs. Needs are generally classified in two categories : physical needs required for bodily functioning (air, water, food), and psychological needs required for mental functioning (stimulation, self-esteem, pleasure). Abraham Maslow developed the theory of Need Hierarchy. Maslow postulated that individual motivation was not only a complex construct but was constantly changing. How important the next level of individual needs is, depends on the degree of fulfillment of the previous level of needs. Once a level of need is achieved, its importance decreases. Maslow maintained that human beings rarely reach complete satisfaction. [Ref. 4: p. 7]

Other researchers believe the standard is derived from human values not needs. Values are what a person desires, wants, or seeks to attain. They are learned or acquired over time. All people have the same basic needs, but they differ in what they value. Values determine the choices people make as well as their emotional responses to those choices. A satisfying Job would then provide an opportunity to attain outcomes that a person values. [Ref. 3: p. 319-322]

b. Social Comparison

The basis of the social comparison theory is the belief that people compare themselves to others assessing their own feelings of job satisfaction. Rather than a within or intraperson comparison (based on needs or values), comparison are made within a social system, interpersonally. An individual observes others in similar jobs or and infers how satisfied they are. The person compares himself or herself to other

people and then derives feelings of satisfaction based upon how others feel about their jobs. [Ref. 6: p. 427]

Weiss and Shaw (1979) conducted a study illustrating the influence of individual perceptions of others' satisfaction. They developed a training film showing people working on an electrical assembly. Two types of tasks were shown, one routine and boring, the other interesting. Throughout the film, actors made comments reflecting negative or positive feelings. Participants in the study then worked on one of the tasks. Then they rated their satisfaction with the task. Results indicated that their feelings were influenced by the reactions of the people performing the same task in the film. Weiss and Shaw thus suggested that a sense of satisfaction is derived by observing others. [Ref. 7: p. 126-140]

c. Opponent-Process Theory

Landy (1978) proposed a radically different job satisfaction theory. He said that the causal basis of satisfaction is physiological, involving the central nervous system. An individual's satisfaction will change over time even though the job remains constant. As an example, a job tends to be more interesting during the first few weeks than it is after several years. This reaction had been simply dismissed as "boredom", but no explanation was provided. Landy suggested that there are mechanism within individuals that help them maintain emotional equilibrium. Since satisfaction and dissatisfaction are, in part, emotional responses, these mechanism are thought to play a role in job satisfaction. Opponent-process refers to opposing processes for dealing with emotion. For example, if a person is very happy, there is physiological response opposing this emotional state and attempting to bring the person back to a neutral level. Extreme emotion (positive or negative) is seen as damaging to individuals. Physiological mechanism are designed to protect a person from these extreme states. Landy suggests that the reason people differ in job satisfaction is because they differ in terms of the stage of their protective physiological function. [Ref. 8: p. 535-545]

d. Two-Factor Theory

Herzberg, Mausner, and Synderman (1959) did individual interviews, asking subjects to describe when they felt very good or bad about their jobs. The interviews were content analyzed for common themes or ideas in the responses. This was done to determine :

1) What kinds of things were mentioned when people described the times they were very satisfied,
2) What kinds of things were mentioned when people described times

they were very dissatisfied,

3) Whether what was described in the two circumstances was different.

The authors found that descriptions of good times included such things as achievement, recognition, advancement, and responsibility. All relate to the content of a job, so they were called content factors. Descriptions of bad times were characterized by factors dealing with company policy, supervision, salary and working conditions. These factors all relate to the context of a person's job, and were therefore labeled context factors

Herzberg proposed two classes of work variables : satisfiers (content factors that result in satisfaction), and dissatisfiers (context factors producing dissatisfaction). Because the theory proposed two general classes of work factors, satisfiers and dissatisfiers, the theory has come to be known as Herzberg's two factor theory. Herzberg then went on to propose what is perhaps the most controversial aspect of his theory. He said that when a Job provides a lot of content factors, i.e., a sense of recognition, advancement, etc., the employee feel satisfied at work. When these factors are absent from a Job, i.e., there is no sense of recognition, advancement, etc., the employee will not be dissatisfied but feel neutral or indifferent. Alternatively, when a job provides a lot of context factors, i.e., a good salary, pleasant working conditions, etc., an employee will not feel satisfied but feel neutral or indifferent toward the Job. When these factors are absent from a job, i.e., the salary is poor, working conditions are unpleasant, etc., an employee will feel dissatisfied. Thus, with a high degree of reward satisfiers will result in satisfaction, and a low degree of reward will result in indifference. Conversely, with a high degree of reward, dissatisfiers will result in indifference, and a low degree of reward will result in dissatisfaction. [Ref. 2: p. 326]

2. The Measurement of job satisfaction

Surveys have been developed to measure job satisfaction, as they have been developed for other attitudes. Some have been used extensively. Others were developed for a single study. Some surveys measure global satisfaction, others facet satisfaction. Many studies of job satisfaction use questionnaires to understand the relationships between different variables and total satisfaction.

Smith, Kendell, and Hulin (1969) developed job Descriptive Index (JDI) to measure job satisfaction. The questionnaire measures five facets : satisfaction with work itself, supervision, pay, promotion, and co-workers. Each facet consists of 9 or 18 items. The employee indicates whether the item describes the Job or not. Each item has

a scale value indicating how descriptive it is of a satisfying Job. Five scale scores are tabulated that reflect satisfaction for each of the facets. The total score on the JDI has also been used to reflect overall job satisfaction.

Smith and Rollo (1974) found the JDI measured satisfaction equally well for blacks and whites. They also confirmed that it successfully measured different facets of satisfaction. Yeager (1981) suggested that the JDI may measure more than five facets. Some of the original scales seem to consist of multiple dimensions. For example, the supervision scale could be broken into satisfaction with the supervisor's ability/performance and interpersonal skills. [Ref. 2: p. 328]

Kunin (1955) developed the measure of job satisfaction using faces scale. It measures global job satisfaction. And, as opposed to words or phrases, the scale points are drawings of human face. A series of scale construction procedures were used to create equal scale intervals. The faces scale is a good measure of overall satisfaction and is widely applicable. Words are not used, so there is less ambiguity about the meaning of the scale points. The person simply checks the face that reflects how he or she feels about the job satisfaction in general. [Ref. 10: p. 70]

Weiss, Dawis, England, and Lofquist (1967) developed the measure of satisfaction that was The Minnesota Satisfaction Questionnaire (MSQ). Like the JDI, the MSQ also measures satisfaction with facets of job. Twenty are included, such as creativity, independence, supervision-human relations, supervision-technical, and working conditions. Each facet is composed of five items. The individual responds on a five-point scale ranging from "very satisfied" (5) to "very dissatisfied" (1). With 20 scales and 5 items per scale, the MSQ takes more time to complete than the JDI. [Ref. 2: p. 330]

3. **Relationship between job satisfaction and life satisfaction**

The interrelationship of job satisfaction and life satisfaction has long been an area of concern in the literature on job attitudes. Kabanoff (1980), Near, Rice and Hunt (1980) discussed the nature of the relationship between job and life satisfaction on the three hypotheses :

a. That there is a positive relationship,

b. That there is a negative relationship,

c. That there is no relationship.

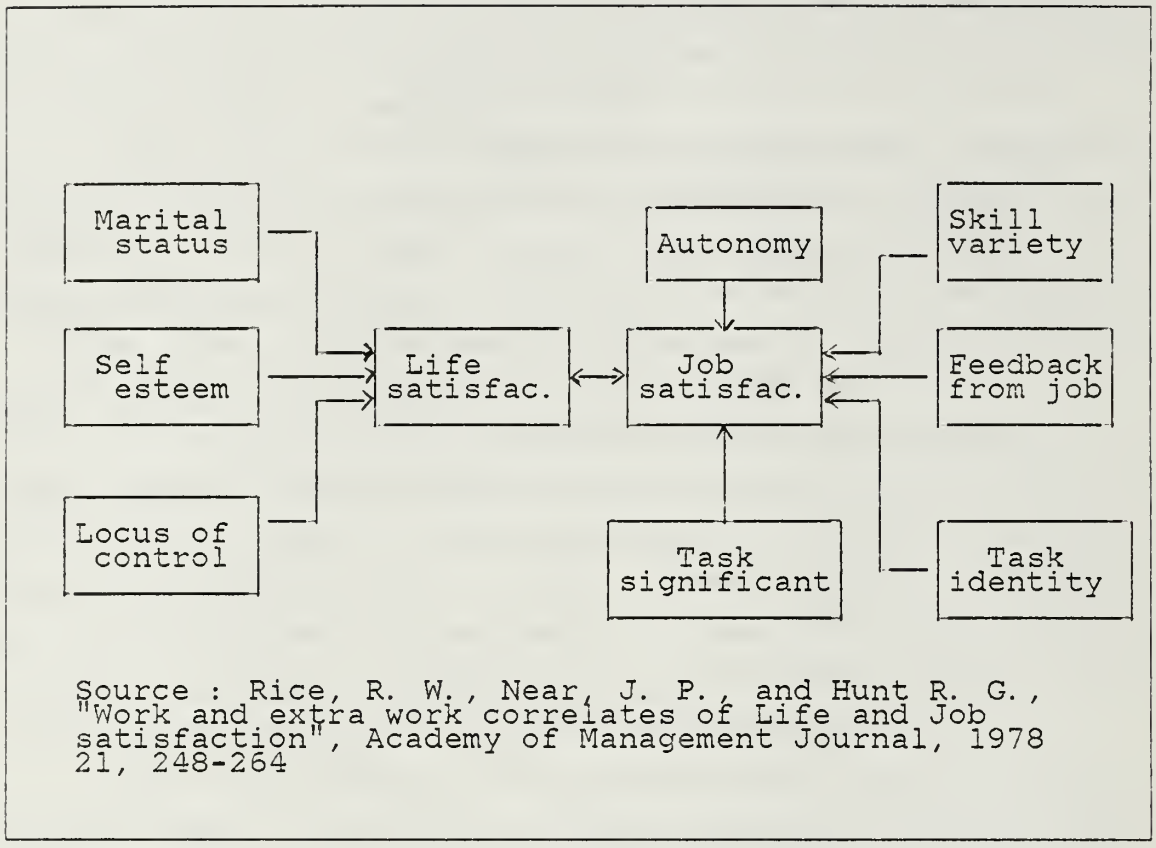
The first hypothesis known as as the generalized or spillover model suggests that satisfaction in one domain of person's life spills over into other areas. The

spillover model suggests that the causal flow is either from job to life satisfaction or from life to job satisfaction, but not both simultaneously. In contrast, the second hypothesis known as the compensation model argues that individuals who have jobs deficient in need fulfillment will compensate for this deficiency by seeking out challenging and interesting nonwork activities. Finally, the third hypothesis known as the segmentation model implies that the worlds of work and nonwork are psychologically separate. That is, there is an independence between the activities and feelings in the work and nonwork spheres of people's lives. [Ref. 12: p. 250]

Rice et al. (1978) have recently suggested that a mutual, interactive relationship may exist between job satisfaction and life satisfaction. That is to say, that job satisfaction and life satisfaction may be directly, as well as reciprocally related. (see Figure 1.1). This diagram indicates that life satisfaction is determined by marital status, self esteem, and locus of control, as well as by job satisfaction. job satisfaction is hypothesized to be the result of the job scope variables : autonomy, skill variety, feedback from the job, task identity, and task significance, as well as life satisfaction. The existence of a positive relationship between life and job satisfaction in either or both directions would be supportive of the spillover hypothesis in that satisfaction in one sphere leads to satisfaction in the other. The existence of negative job and life satisfaction relationship in either direction would lend credence to the compensation hypothesis and the absence of any relationships between live and job satisfaction would be consistent with the segmentation hypothesis.

Dubin (1956) proposed the concept of central life interest. He defined this as an expressed preference for behaving in a given locale. Some people see work as a central life interest. Dubin calls them job oriented. Such people should have a high evaluation of work and would score relatively high on satisfaction measures. Other individuals have central life interests other than work (church, family, or community). Dubin calls them non-job oriented. A smaller portion of this group should have strong feelings of job satisfaction. A third group may express no clear preference. They have a flexible focus central life interest. For this group we would expect a small relationship between central life interests and job satisfaction. [Ref. 13: p. 806-807]

Gechman and Wiener (1975) examined how job satisfaction contributes to overall life satisfaction and general mental health. They sampled elementary school teachers using a job satisfaction questionnaire and a self-report assessment of mental health. The correlation between job satisfaction and general mental health was .48.



Source : Rice, R. W., Near, J. P., and Hunt R. G., "Work and extra work correlates of Life and Job satisfaction", Academy of Management Journal, 1978 21, 248-264

Figure 1.1 Structural model of the determinants of Job and Life satisfaction.

The authors were led to conclude that "positive feelings toward work role may reach out and carry over into other sectors of life"

London, Crandell, and Seals (1977) used national survey data to investigate how much job and leisure satisfaction contributed to the quality of life. The findings revealed that non-job related variables can be more important to a full life than job satisfaction for many subgroups of the population.

Orpen (1978) correlated measures of job and life satisfaction in a sample of first-line managers. The design of Orpen's study suggested some causal relationship between job and life satisfaction. He concluded that differences in job satisfaction cause differences in fulfillment of life outside the job. He also concluded that satisfaction in one area spills over into the other area. [Ref. 14: p. 530-532]

4. **Relationship between job satisfaction and turnover**

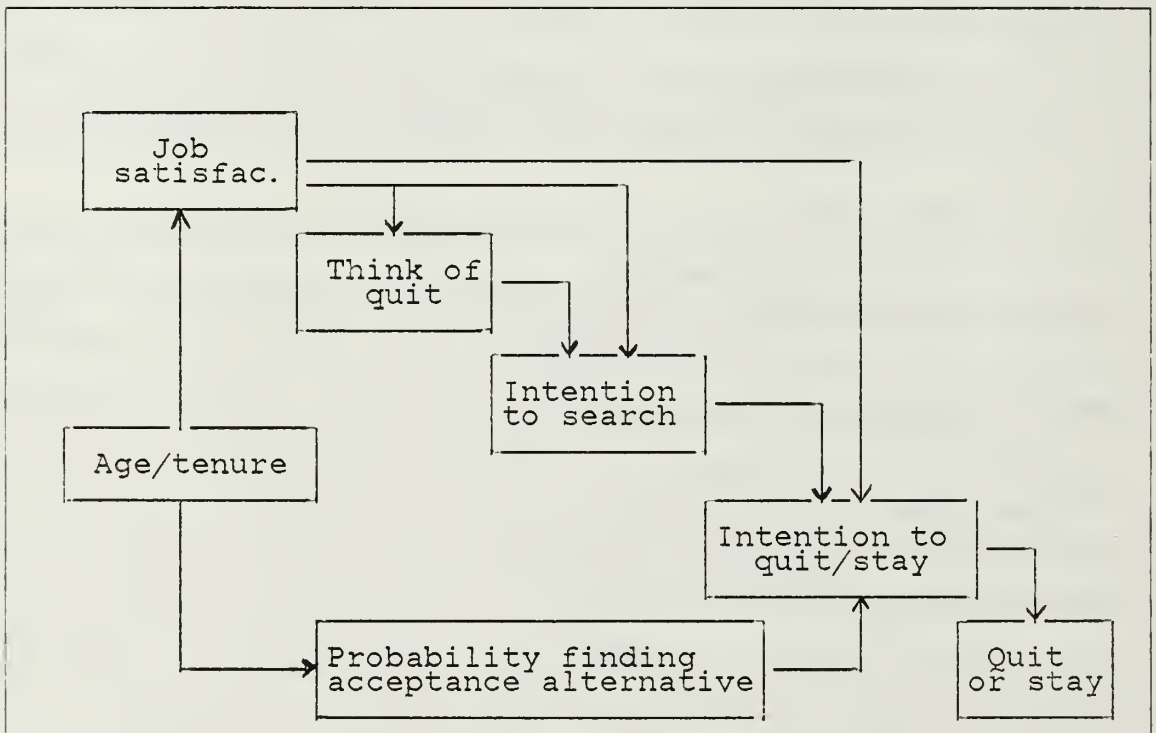
The relationship between job satisfaction and turnover is significant and consistent. Reviews of the literature on the relationship between employee turnover and job satisfaction have reported a consistent negative relationship.

Muchinsky and Tuttle (1979) summarized 39 studies of the relationship between satisfaction and turnover. In all but four the relationship was negative. It appears then that the more people dislike their jobs, the more likely they are to quit. The magnitude of the satisfaction-turnover relationship, on average, is about -.40. As an example of such work, Hulin (1966) matched clerical employees who quit with those who didn't via several demographic variables. Hulin obtained satisfaction measures for all employees before any quit. He found that the mean satisfaction score for those who eventually did quit was significantly lower than for those who stayed with the company. Thus, it appeared that turnover could be predicted on a group basis, though the data did not permit individual prediction. A year later Hulin (1968) repeated the study in the same company and got the same results. Changes in company practices meant to reduce turnover by improving satisfaction were also successful. [Ref. 5: p. 122-126]

Mobley (1977) proposed a model of employee turnover based on several hypothesized links between satisfaction and quitting. Such links include thinking of quitting, looking for another job, intending to quit (or stay). Mobley contended that feelings of dissatisfaction provoke thoughts of quitting, which in turn prompt the search for another job. The evaluation of the cost of quitting would include such considerations as loss of seniority, loss of vested benefits, number of dependents, and the like. If the costs of quitting are too high, the person may reevaluate the job (producing a change in satisfaction), think less about quitting, and use other responses like absence or passive behavior. If the costs are not too high, and the other job looks good, this will stimulate the intention to quit, followed by actual quitting. If the alternative job is not good, the situation may stimulate the intention to stay. Mobley's model was a major step forward in thinking of the process from Job dissatisfaction to turnover, instead of repeatedly assessing the direct relationship between satisfaction and turnover. [Ref. 9: p. 408]

Mobley, Horner, and Hollingsworth (1978) tested the model, which is presented in Figure 1.2. They measured the satisfaction of 203 full-time hospital employees. The authors also obtained measures of the other variables in the model

such as age, thinking of quit, intention to search another job, intention to quit or stay and probability finding acceptance alternative. turnover data were collected for 47 weeks after collection of the satisfaction data. Using correlation and multiple regression analysis, Mobley et al. tried to predict turnover from the variables in the model. Overall job satisfaction was found to correlate -.54 with thinking of quitting, -.54 with intention to search, -.49 with intention to quit/stay, and -.21 with actual turnover. When all the variables in the model as shown in figure 1-2 were combined to form a multiple regression equation, the multiple correlation for intention to quit was .75, while the multiple correlation for actual quitting was .51. Mobley et al. were able to demonstrate that cognitive and behavioral phenomena intervene between feelings of job satisfaction and actual quitting. Clearly, employee turnover is predicated on more than feelings of unhappiness about a job. [Ref. 10: p. 408-414]



SOURCE : W. H. Mobley, S. O. Horner, and A. T. Hollingsworth, "An Evaluation of Precursors of Hospital Employee Turnover", Journal of Applied Psychology 63, 1978, pp. 408-414

Figure 1.2 A Representation of the Employee Turnover Process.

5. Relationship between job satisfaction and personal variables

Several studies dealt with the relationship between job satisfaction and such personal variables as age, race, and gender. The results are only moderately consistent. That is, we can't say that males are always found to be more satisfied than females, or whites more than blacks. These are some findings :

a. Age

Previous research has established that age and tenure are negatively associated with turnover. Hulin and Smith (1965), Gibson and Klein (1970) suggest that global satisfaction increases with age, especially for males. Thus, the most dissatisfied workers are the youngest, and the most satisfied are those nearing retirement. Glenn, Taylor, and Weaver (1977) reported similar findings for females. This is logical because long tenure employees clearly like that jobs or would have quit. The relationship between job satisfaction and age is not so uniform. Hunt and Saul (1975) reported that satisfaction with work, supervision, working conditions, and co-workers increased with age in a sample of males, but the only significant positive relationship for females was for satisfaction with work. Satisfaction with promotion opportunities was negatively related to age for both sexes. There was no relationship between age and satisfaction with pay for males, and a negative relationship was found for females. Muchinsky (1978) reported somewhat different results. He found that older employees were least satisfied on four of the five scales of the supervision, pay, promotion, and co-workers. Both studies did report similar relationships between satisfaction with promotion opportunities and age. [Ref. 2: p. 332]

b. Race

Research on job satisfaction and race is characterized by conflicting results. Some studies have reported little or no differences between racial groups in reported job satisfaction (Jones et al., 1977; Katzell, Ewen and Korman, 1974; Weaver, 1977) Some of the early studies compared blacks and whites in terms of which needs were satisfied on the job. Slocum and Strawser (1972) reported that black certified public accountants were less satisfied than their white counterparts along a number of dimensions, including needs for esteem, autonomy, self-actualization, and compensation. Similar results were reported by Bloom and Barry (1967) and O'Reilly and Roberts (1973). While Brenner and Fernsten (1977) found that blacks have higher satisfaction than whites in comparable jobs. [Ref. 15: p. 300]

Jones, James, Bruni, and Sells (1977) suggested that black-white differences in satisfaction are not as important as understanding why they occur. Only one study (Moch, 1980) systematically dealt with explanations. Moch investigated two potential determinants of satisfaction : structural and cultural. Structural explanations state that systematic differences in the way employees are treated account for racial differences in satisfaction. An example would be black employees having fewer promotion opportunities. Cultural explanations attribute satisfaction differences to beliefs, values, or psychological states. More research should be done on why such differences do (or do not) occur. If structural factors are a cause of differential satisfaction, an organization would have the power to alter these inequities. However, if cultural factors are a major cause of satisfaction differences, we have few options in improving the situation. The effect of years of discrimination can not be erased quickly. As Moch stated, it may take a long time to reach equity in satisfaction among different races. Research on the causes of racial effects helps in identifying what can be done to improve satisfaction as well as identifying factors that cannot be controlled. [Ref. 16: p. 6]

There are a number of explanations of race-related differences in job satisfaction, that are common in the literature. Cultural explanations attribute the differences to the values, beliefs and psychological states that contribute to how members of different subgroups will respond to their work experience (Alper, 1975; Bloom and Barry, 1967; Jones et al., 1977). An analog to this theory is the concept of frames of reference. Different subcultures develop different frames of reference which influences the individual's perceptions of the job and also affects which aspects of the job will be satisfying or dissatisfying. [Ref. 15: p. 299]

Structural explanations of varying job satisfaction by race maintain that it is a function of how the members of different racial groups are treated by the organization, by supervisors and co-workers. Some studies have identified fewer promotion opportunities for black employees as the reason for their lower reported satisfaction (Smith et al., 1974; Brown and Ford, 1977; Fields and Freeman, 1972). Supervisor bias exhibited in performance evaluations has also been credited with causing differential satisfaction levels (Hamner, Kim Baird and Bigoness, 1974; Katz and Greenbaum, 1963; Katz, Roberts, and Robinson, 1965). [Ref. 15: p. 300]

Another possible explanation for racial differences in job satisfaction derives from differences in individual motivational structure. Arvey and Musio (1974)

found that extrinsic rewards (eg. high pay, security, etc.) were more important to culturally disadvantaged employees while advantaged employees placed more emphasis on intrinsic factors. [Ref. 16: p. 6]

c. Gender

Research on the relationship between job satisfaction and gender is inconsistent. Some studies report that males are more satisfied than females, some report the opposite, yet others report no differences. Hulin and Smith (1964) think sex differences are due to differences in education, pay, and tenure. Males and females are equally satisfied with their jobs when these factors are controlled for. Sauser and York (1978) found that males were more satisfied in global terms and also with regard to such facets as promotion, supervision, and work. When differences between the sexes in education, pay, and tenure were considered, there were no significant differences between males and females. The only significant findings was that women were more satisfied than men with pay. It appears that male/female differences per se do not account for much variance in job satisfaction. Rather it is other variables (such as education) that are correlated with gender which best explain male/female differences in job satisfaction. Several studies have tried to find the sources of job satisfaction for men and women.

Andrisani and Shapiro (1978) reported that females derived satisfaction from both content and context factors. Results were similar to studies that tested the validity of Herzberg's theory with men. It would be a mistake, however, to conclude that women and men are equal in their feelings about work. Traditionally, married males have been the principal wage earners in a family, and females have had the main responsibility for child rearing. As more married woman return to work, they experience role conflict that influences their feeling about a job. [Ref. 18: p. 15-34]

6. **Relationship between job satisfaction and individual characteristics**

Porter and Steers (1983) pointed out that an individual would be satisfied if the individual's perceived outcome is the same as what the individual felt he or she should receive. The individual would received be dissatisfied if the outcome he or she perceived to receive was below what the individual felt he or she should receive. Also, the perceived amount of what should be received was a function of what others received.

The Porter and Steers model also indicated satisfaction was a function of individual characteristics and job characteristics. They claimed that a higher level of job

input such as an individual characteristics of skill, experience, age, training and education, resulted in a higher perceived amount that should be received. Therefore, people who have high job inputs must receive a greater amount of a desired outcome than people with low inputs or they will be dissatisfied. The model also indicated that individuals with jobs more demanding in terms of such things as responsibility, time span, and level of difficulty, would perceive more of a particular outcome. An outcome could be money, recognition, promotion, control over the work performed, or interaction with co-workers. [Ref. 19: p. 332-338]

7. **Relationship between job satisfaction and working conditions**

Many researchers have been interested in the relationship between people's feeling about their job and working conditions. Ronen (1977) examined the job-facet satisfaction of paid and unpaid industrial workers (kibbuttz). A kibbutz is an Israel voluntary collective settlement operating as a single economic unit and governed by a general assembly composed of all their members. Kibbutz members' needs are provided on an egalitarian basis and include food, clothing, housing, medical care, recreation, and equal pocket money, all of which are based on need and not on the level or style of their work or participation. Ronen administered the JDI to a sample of 135 unpaid kibbutz workers and 187 paid city workers. The pay scale of the JDI was not given to the kibbutz workers. Ronen wanted to see whether the general pattern of job-facet satisfaction scores was comparable for the two groups. Ronen found that the most importance facet (strongest correlate with overall job satisfaction) was satisfaction with supervision, followed by work, promotions, and co-workers. Ronen concluded that the nonmonetary aspects of satisfaction could be distinguished as clearly for unpaid as for paid workers, and that nonmonetary aspects could be studied independent of attitude toward pay. [Ref. 2: p. 336]

8. **Relationship between job satisfaction and expectations**

Mowday, Porter, and Steers found that the individual had certain expectations about his or her job depending on the individual characteristics and the available information about the job. Once the individual had been employed for a period of time, the employee developed attitudes towards his or her expectations, and how the current Job compared with the job opportunities foregone. If the employee developed negative attitudes towards his or her job, then he or she began to consider ways of changing the situation. One way to change the situation was to quit the job, but that decision was weighed against the alternative jobs available, and other non-job

influences to stay or leave. If there were other jobs available and the non-job influences weighed in favor of leaving, then the employee left. [Ref. 20: p. 116-126]

II. DATA AND METHODOLOGY

A. DATA

The data used in this research was the 1985 DoD Survey of Officer and Enlisted Personnel which conducted for the Office of the Assistant Secretary of Defence (Force Management and Personnel) by the Defense Manpower Data Center (DMDC). This survey is one of two separate, but interrelated, surveys conducted in 1985 :

1. The 1985 DoD Survey of Officer and Enlisted Personnel - a world-wide survey of approximately 132,000 active-duty military members;
2. The 1985 DoD Survey of Military Spouses - a survey of the spouses of all married members selected for the member survey.

Jointly, the surveys are referred to as the 1985 Dod Surveys of Officer and Enlisted Personnel and Military Spouses. The objective of these surveys is the systematic examination of policy-sensitive information about the military life cycle. The military life cycle includes both reserve and active force enlistment decisions, career orientations, responses to policies that affect military members and their households, and decisions to leave the military.

As in all the previous DoD-wide Surveys, the basic stratification variable for the 1985 DoD Survey is service. Within each service, the enlisted samples are stratified by length of service and gender. Officers, females, and Marine Corps personnel were sampled at a higher rate in order provide sufficient sample size to permit detailed analyses of these groups. The structure used was very similar to that used for the 1978 1979 DoD Survey in order to facilitate compared in such areas of personnel management as reenlistment intentions. The final sample sizes were based on compromise between the number of questionnaires needed for detailed analyses of special small populations and budgetary constraints. [Ref. 21: p. 2-5]

The data utilized in this thesis were limited to male enlistees in the first term of service. Individuals whose ethnic classification was other than Black, White, or Hispanic were excluded from the sample because their number was insufficient to perform any meaningful statistical analysis on their survey responses.

B. CAUSAL MODEL, FACTOR CATEGORIES, AND CANDIDATE VARIABLES.

1. Causal model and factor categories

A causal model of job satisfaction is presented in Figure 2.1. As indicated in the literature review, earlier studies indicate that factors considered to be determinant of job Satisfaction can be categorized as :

a. Personnel background and individual characteristics (Vroom, Porter and Steers, Hopkins, Scarpello and Campbell)

b. Satisfaction with working conditions and living environments (Ronen, Miller and Terborg, Hopkins, Herzberg et. al, David F. Caldwell et.al)

c. Expectations (Vroom, Mowday, Porter and Steers, Hopkins, McCormick and Ilgen, Locke, E. A.)

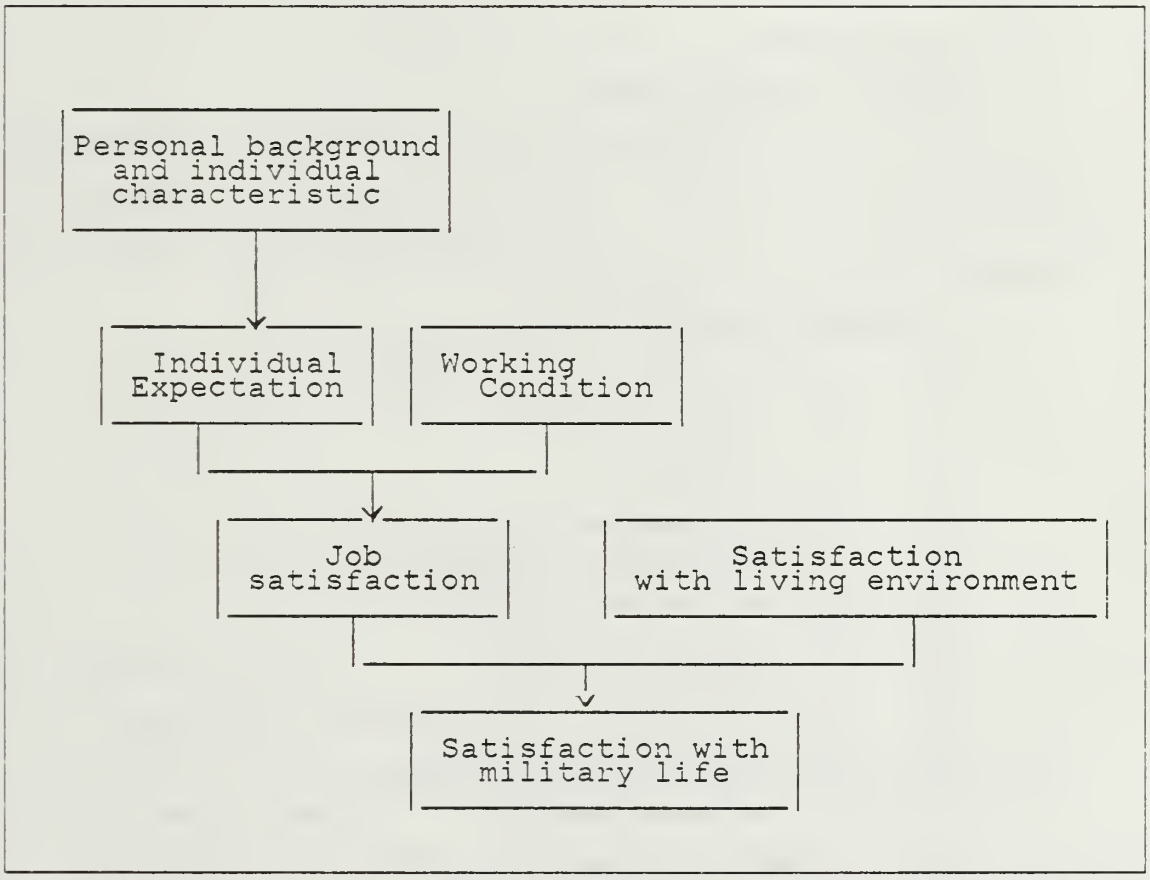


Figure 2.1 Relationship between life satisfaction and factors considered to be determinant of satisfaction with military life..

The literature on job satisfaction revealed that satisfaction with military life (O110E106) may serve as a good indicator of job satisfaction. The DOD 1985 Survey of Officer and Enlisted Personnel used a single seven point scale measurement of satisfaction. Respondents were asked how satisfied they were with life in the military. The questions were : "Now, taking all things together, how satisfied are you with the military as a way of life ?" Seven responses were possible, ranging from "very dissatisfied" to "very satisfied"

1 = Very dissatisfied

2 = Dissatisfied

3 = Somewhat dissatisfied

4 = Neither dissatisfied / satisfied

5 = Somewhat satisfied

6 = Satisfied

7 = Very satisfied

2. **Candidate explanatory variables**

This section identifies the questions in the DOD 1985 Survey of Officers and Enlisted Personnel which provide variables considered to be determinants of job satisfaction (independent variables). The following candidate variables will be taken as measuring determinants of job satisfaction :

a. Personal background and individual characteristics

(1) *Age (O36 E35).*
(2) *Where born, State (O37 E36).*
(3) *Race (O39 E38).*
(4) *Current education (E42).*
(5) *Current high school certificate (E43).*
(6) *Current marital status (O51 E48).*
(7) *Marital status at entry (O50 E47).*
(8) *Mother's education (O49 E46A).*
(9) *Father's education (O49 E46B).*
(10) *Number of dependents (O67 E64).*
(11) *Months of active service (O6 E6).*
(12) *Months at current location (O13 E12).*

b. Satisfaction with working conditions

(1) *Personal freedom (O109 105A).*
(2) *Acquaintance/Friendships (O109 105B).*
(3) *Workgroup/Co-worker (O109 105C).*

(4) *Assignment stability (O109 105D).*
(5) *Pay and Allowance (O109 105E).*
(6) *Environment for family (O109 105F).*
(7) *Frequency of moves (O109 105G).*
(8) *Retirement benefits (O109 105H).*
(9) *Opportunity to serve country (O109 105I).*
(10) *Satisfaction with current job (O109 105J).*
(11) *Promotion opportunities (O109 105K).*
(12) *Job-training/In-service education (O109 105L).*
(13) *Job security (O109 105M).*
(14) *Work/environmental conditions (O109 105N).*
(15) *Post service education benefits (O109 105O).*
(16) *Medical care (O109 105P).*
(17) *Dental care (O109 105Q).*
(18) *Commissary service (O109 105R).*

c. Feeling about Living environments

(1) *Climate (O20 E19A).* –
(2) *Distance to population (O20 E19B).* –
(3) *Family ability to handle cost (O20 E19C).*
(4) *Availability of military housing (O20 E19D).*
(5) *Quality of military housing (O20 E19E).*
(6) *Availability of civilian housing (O20 E19F).*
(7) *Availability of goods/services at post (O20 E19G).* –
(8) *Recreational centers (O20 E19H).* –
(9) *Local attitudes towards military family (O20 E19I).* –
(10) *Avail. fed. employ for spouse/depend. (O20 E19J).*
(11) *Avail. other civilian employ spouse/depend. (O20 E19K).*
(12) *Quality of schools (O20 E19L).*
(13) *Quality of medical care (O20 E19M).* –

d. Expectations

(1) *Life in military about what expected (O108 104A).*
(2) *Military benefits in future (O108 104B).*
(3) *Military benefits keep up with inflation (O108 104C).*

C. METHODOLOGY

1. Prepare data for analysis

This section will examine the techniques to prepare the data for analysis :

a. Dummy variables.

Some of the candidate explanatory variables are nominal. Since the numbers assigned to categories of a nominal scale are not assumed to have an order and unit of measurement, they can't be treated as "scores" as they would be in conventional regression analysis. Dummy variables are created by treating each

category of a nominal variable as a separate variable and assigning a zero to indicate the absence of that attribute and a one to indicate the presence. For example married is dummy variable with currently married equals to one and single, divorced or separated equal to zero.

b. Assign missing value

Very often, the data file lacks complete information on some cases for some variables. Interviewers can forget to ask a question or record an answer, respondents can refuse to answer, data can be entered incorrectly, and so forth. Missing does not always mean the same as unknown or absent. Responses which were not answered from the 1985 DoD Survey are recoded to equal -1, -3, and -8 to identify a missing value.

2. **Bivariate Analysis**

In order to determine the effect of race to job satisfaction and the effect of race on those factors considered to be determinants of job satisfaction, a bivariate analysis will be conducted. The bivariate analysis seeks to determine if there is a significant difference in job satisfaction by race and if there is a significant difference in factors thought to be determinants of job satisfaction by race. The statistically significant differences in response to certain questions by race is measured by chi-square test for discrete variables or test of means for continuous variables. The bivariate analysis will be conducted in the satisfaction with military life variable and in four groups of variables thought to be determinants of job satisfaction : personal background and individual characteristics, working conditions, living environments, and expectations.

3. **Factor Analysis**

Factor analysis will be conducted to reduce the number of independent variables and to reduce multicolinearity between these variables. The groups of variables under living environments and working conditions will be analyzed utilizing the factor analysis procedure in SPSSX. The factor analysis method utilized is principal components which transforms the variables into a new set of composite variables that are uncorrelated to each other. The composite variables are derived as the best linear combination of variables (ie. that combination which will explain more variance in the data as a whole, than any other combination of variables). The first principal-component explains the most variance in the data. The second principal-component is the second best linear combination of variables and is uncorrelated to the

first. Therefore, the second component actually explains the most residual variance after the effect of the first component is taken into account. Subsequent components explain the most residual variance remaining after the effect of the preceding components has been removed. [Ref. 28: p.470]

Once the original variables are reduced into factors, the factor are rotated into terminal factors which are easier to enterpret. There are many statistically equivalent ways to express the underlying relationships in a given set of data. This analysis used the varimax method of rotation. Varimax concentrates on simplifying the columns of the factor matrix. This is equivalent to maximizing the variance of the squared loadings in each column. [Ref. 28: p. 472]

4. **Regression Analysis**

The regression model consist of a single dependent variable to measure job satisfaction. The independent variables are the factor scores generated in the factor analysis and selected variables. Regressions will be run against satisfaction with military life for all races, separately for each race and branches of service. Chow test will be conducted for pairwise comparisons of the racial and branch of service groups. A block entry form of regression will be used which enters all the variables into the model and calculates the significance of each variable's contribution to the model as shown in Figure 2.2 The final output of the regression analysis indicate the effect of the variables in the model, the t statistic for each variable, and the significance of the t statistic.

```
Satisfaction with military life = f((Personal
background and individual characteristic, working
conditions, living environments, expectations)
```

Figure 2.2 Satisfaction With Military Life's Regression Equation.

III. ANALYSIS

A. BIVARIATE ANALYSIS

1. Analysis the results

The bivariate analysis is conducted in the satisfaction with military life variable and in the four groups of variables thought to be determinants of job satisfaction : personal background and individual characteristics, satisfaction with working conditions, satisfaction with living environments and expectations.

Table 1 shows the mean response by blacks, whites, and hispanics on the satisfaction with military life question.

The average feeling of satisfaction with military life was found to be significantly different by race. The black and hispanic respondents reported that their average feeling of satisfaction with military life was statistically higher than the white respondents.

TABLE 1
SATISFACTION WITH MILITARY LIFE BY RACE

	prob value	mean		
		white	black	hisp
Sat. with mil. life	.014	3.9	4.1	4.0
N (number of cases)		8549	1709	946

Note :
1 = Very dissatisfied
2 = Dissatisfied
3 = Somewhat dissatisfied
4 = Neither satisfied/ dissatisfied
5 = Somewhat satisfied
6 = Satisfied
7 = Very satisfied

Table 2 shows the results of the bivariate analysis conducted on the variables concerned with the personal background and individual characteristics. The probability values (the likelihood of indicated difference occuring by chance) are given for each

variable using either chi-square tests or tests of means. The average age and the time at current location were found not to be significantly different by race, while average current education, parent's education, number of dependents, and length of service were found to be significantly different by race.

TABLE 2

PERSONAL BACKGROUND AND INDIVIDUAL CHARACTERISTIC BY RACE

	prob value	mean		
		white	black	hisp
Age	.288	21.7	21.7	21.8
Current education	.001	12.3	12.4	12.4
Mother's education	.001	12.5	12.4	12.2
Father's education	.001	12.7	12.0	11.7
Number of dependents	.001	1.3	1.5	1.4
Months of service	.047	25.7	24.9	25.7
Months at current loc	.107	16.6	17.0	17.1
N (average of samples)		8055	1512	847
	prob value	% with attribute		
		white	black	hisp
Married at entry	.001	11.9	6.9	12.1
Currently married	.085	31.9	29.3	32.5
High school graduate	.138	97.7	98.4	97.5
Born in USA	.001	97.1	95.7	73.8
N (average of samples)		8224	1625	922

The current education of the respondents and their parent's education were measured in continuous scale of 1 (elementary school-first grade) to 20 (college more than 8 years). The average current education that respondents reported was statistically higher for the blacks than it was for whites and hispanics. Hispanic respondents indicated that their parent's education was on average lower than it was for blacks and whites. Black respondents reported more dependents than whites and hispanics, while the length of service that respondents reported was slightly higher for the hispanics than it were for whites and blacks.

The Marital status of military members will affect service members attitude toward the service especially in areas such as military rotation policy, work and deployment schedules. It may also affect an individual's decision whether to remain on the service or leave. The Marital status at entry and currently married variables are dummy variable where married equals one and not married equal zero. The Marital status at entry was found to be significantly different by race, while the currently marital status was found not to be significantly different by race. The respondents reported that 11.9% whites, 6.86% blacks, and 12.12% hispanics were married when they entered the military.

The current high school certificate variable is dummy variable where high school graduate equals one and non high school graduate equal zero. This variable was not significantly different by race. Where born variable is dummy variable where born in USA equal one and not born in USA equal zero. This variable was significantly different by race. 97% of white, 95% black and 73% hispanic respondents reported were born in USA.

Table 3 shows the results of the bivariate analysis conducted on the variables concerned with satisfaction with working conditions. These variables were measured on a likert scale of 1 (very satisfied) and 5 (very dissatisfied).

Personal freedom, pay and allowances, retirement benefits, promotion opportunities, job training and environmental conditions were found not to be significantly different by race. while friendships, co-workers, assignment stability, family environment, frequency of moves, serve country, happy with job, job security, VEAP benefit, medical care, dental care and commissary services variables were significantly different by race.

White respondents feel more satisfied with their friendships, co-workers and feelings about assignment stability than blacks and hispanics, while black and hispanic respondents reported more satisfied with their family environment than whites. White and hispanic respondents reported more satisfied in opportunity to serve one's country and their feeling about their current job than blacks. White respondents feel more satisfied in job security than blacks and hispanics. Black respondents reported more satisfaction in VEAP benefit, medical care, dental care and commissary services than white and hispanic respondents.

Table 4 shows the results of the bivariate analysis conducted on the variables concerned with satisfaction with living environments. Respondents were asked their feeling about characteristics of their current location. These variables were measured on a likert scale of 1 (excellent) to 5 (very poor).

TABLE 3

SATISFACTION WITH WORKING CONDITIONS BY RACE

	prob value	mean		
		white	black	hisp
Personal freedom	.809	3.3	3.3	3.2
Friendships	.001	2.2	2.3	2.3
Co-worker	.001	2.5	2.6	2.6
Stability	.001	2.8	2.9	2.9
Pay and allowance	.121	3.3	3.2	3.2
Family environment	.001	3.0	2.9	2.9
Moving	.042	2.9	2.9	3.0
Retirement benefit	.285	2.9	2.8	2.8
Serve country	.001	2.0	2.2	2.0
Happy with job	.001	2.8	2.9	2.8
Promotions	.194	3.2	3.3	3.3
Job-training	.221	2.9	2.9	2.9
Job security	.001	2.3	2.5	2.4
Environment condition	.752	2.9	2.9	2.9
VEAP benefit	.001	2.7	2.6	2.6
Medical care	.001	2.5	2.3	2.4
Dental care	.001	2.5	2.2	2.4
Commissary services	.001	2.5	2.3	2.3
N (average of samples)		8475	1694	935

Note :
1 = very satisfied
2 = satisfied
3 = neither satisfied / dissatisfied
4 = dissatisfied
5 = very dissatisfied

Respondents reported their feelings about climate, distance to population center, military housing quality, goods and services, attitudes of locals, federal job for spouse, civilian employment, school and medical care variables were significantly different by race. Cost of living, military housing availability, civilian housing and recreation variables were not significantly different by race. White respondents reported a better average feeling about the climate, distance to population centers and Availability of other civilian employment for spouse or dependents than blacks and hispanics. Black respondents reported a better average feeling about the quality of military housing, availability of goods and services, attitudes of local residents toward military families and quality of medical care than white and hispanic respondents. Hispanic respondents reported a better average feeling about the availability of Federal

TABLE 4

FEELING ABOUT LIVING ENVIRONMENTS BY RACE

	prob value	mean		
		white	black	hisp
Climate	.001	2.5	2.6	2.6
Distance to pop center	.001	2.5	2.8	2.7
Cost of living	.410	2.9	2.9	2.9
Mil-housing avail	.057	3.6	3.5	3.6
Mil-housing quality	.001	3.2	3.0	3.1
Civilian housing	.295	2.9	2.9	2.9
Goods and service	.020	2.6	2.5	2.6
Recreation	.118	2.6	2.5	2.6
Attitudes of local	.001	3.1	2.9	3.0
Fed. job for spouse	.001	3.6	3.6	3.5
Civilian employment	.015	3.2	3.4	3.3
School	.010	2.7	2.6	2.4
Medical care	.015	2.3	2.3	2.3
N (average of samples)		5563	1066	605

Note :
1 = excellent
2 = good
3 = fair
4 = poor
5 = very poor

employment for spouse or dependents and quality of schools for dependents than black and white respondents.

Table 5 shows the results of the bivariate analysis conducted on the variables concerned with life in the military as expected. These variables were measured in five point scale of agreement, 1 (strongly agree) to 5 (strongly disagree). White respondents reported more agreement than black and hispanic respondents with the statements of life in the military is about what I expected it to be, military personnel in the future will not have as good retirement benefits as I have now and my military pay and benefits will not keep up with inflation variables.

2. **Summary of the results**

The findings from the bivariate analysis were that :

a. Satisfaction with military life

Satisfaction with military life variable was significantly different by race. The Black and hispanic respondents reported that their average feeling of satisfaction with military life were higher than the White respondents.

TABLE 5

MILITARY LIFE AS EXPECTED BY RACE

	prob value	mean		
		white	black	hisp
Life as expected	.001	3.0	3.2	3.1
Retirement benefit	.001	2.5	2.7	2.7
Inflation	.002	2.0	2.1	2.1
N (average of samples)		8531	1703	940

Note :
1 = Strongly agree
2 = Agree
3 = Neither agree / disagree
4 = Disagree
5 = Strongly disagree

b. Personal background and individual characteristic

Age and current high school certificate variables were not significantly different by race. This result is, in large part, because of the selection process. Individuals eligible for a commission as a military enlistee must be of a certain age and most require high school certificate. Current education, parent's education, number of dependents, months of service, marital status at entry, and where were born variables were significantly different by race.

c. Satisfaction with working conditions

Personal freedom, way and allowance, retirement benefit, promotion, job training and environmental condition variables were not significantly different by race. Friendships, co-workers, stability, family environment, serve country, happy with job, job security, Veap benefit, medical care, dental care and commissary services variables were significantly different by race.

d. Feelings about living environments

Cost of living, military housing availability, civilian housing and recreation were not significantly different by race. Feeling about climate, distance to population center, military housing quality, goods and service, attitude of locals, federal job for spouse, civilian employment, school and medical care were significantly different by race.

e. Expectations

Life in the military as expected, military personnel retirement benefits and military pay will not keep up with inflation variables were significantly different by race.

B. FACTOR ANALYSIS

1. Satisfaction with working conditions

Factor analysis was conducted on sixteen variables under satisfaction with working conditions to reduce the number of independent variables into two factors and reduce multicolinearity between them. As in the previous section, the data was analyzed separately for the blacks, hispanics, and whites.

Table 6 shows the factor matrix for the black respondents. The numbers in the rows are the loadings which represent regression coefficients of the factors that describe a particular variable. Some of the variables load significantly on only one factor (eg. personal freedom, friendships, workgroup/co-worker, assignment stability, pay and allowance, environment for family, frequency of moves, retirement benefits, opportunity to serve country, promotion opportunities, job-training, job security and environmental conditions). While others may load moderately on two factors (eg. satisfaction with current job, education benefits, medical care, dental care and commissary service). The variables in factor one were given a new name as job characteristic and the variables in factor two as environment and benefits. These two variables will be used as independent variables in regression analysis.

The eigenvalue of a factor is a measure of the relative importance of that factor. The sum of the eigenvalues equals the amount of the total variance that exists in the variables (total variance in this case is sixteen because sixteen variables were included in the analysis). The eigenvalue for factor 1 (job characteristic) was 5.77 explaining 32% of the total variance in the variables. The eigenvalue for factor 2 (environment and benefits) was 1.61 explaining 8.9% of the variance.

Table 7 is the factor matrix for the hispanic male enlistees. Job characteristic and environment and benefits variables for the hispanic enlistees is almost the same as job characteristic and environment and benefits variable for the black enlistees. The differences are in the order of the loadings and that the satisfaction with current job and education benefit variables loaded moderately between job characteristic and environment and benefits for the black enlistees but loaded most heavily on job

TABLE 6

FACTOR SCORE OF WORKING CONDITIONS FOR BLACK MALE ENLISTEES

VARIABLE	Fac1 (Job char.)	Fac 2 (Env. & benf.)
Personal freedom	.579	
Friendships	.510	
Workgroup/Co-worker	.596	
Assignment stability	.637	
Pay and Allowance	.573	
Frequency of moves	.442	
Retirement benefits	.529	
Sat. with current job	.599	-.351
Promotion opportunity	.561	
Job-training	.653	
Job security	.616	
Environmental cond.	.682	
Education benefits	.534	.301
Medical care	.579	.596
Dental care	.515	.664
Commissary service	.457	.510

TABLE 7

FACTOR SCORE OF WORKING CONDITIONS FOR HISP. MALE ENLISTEES

VARIABLE	Fac 1 (Job char.)	fac 2 (Env. & benf.)
Personal freedom	.647	
Friendships	.504	
Workgroup/Co-worker	.588	
Assignment stability	.684	
Pay and Allowance	.664	
Frequency of moves	.444	
Retirement benefits	.518	
Sat. with current job	.681	
Promotion opportunity	.633	
Job-training	.693	
Job security	.594	
Environmental cond.	.717	
Education benefits	.539	
Medical care	.565	.649
Dental care	.494	.705
Commissary service	.521	.410

TABLE 8

FACTOR SCORE OF WORKING CONDITIONS FOR WHITE MALE ENLISTEES

VARIABLE	Fac1 (Job char.)	Fac 2 (Env. & benf.)
Personal freedom	.605	
Friendships	.462	
Workgroup/Co-worker	.541	-.336
Assignment stability	.613	
Pay and Allowance	.588	
Frequency of moves	.473	
Retirement benefits	.490	
Sat. with current job	.624	-.356
Promotion opportunity	.539	
Job-training	.635	
Job security	.582	
Environmental cond.	.684	
Education benefits	.405	.324
Medical care	.533	.611
Dental care	.477	.632
Commissary service	.441	.422

characteristic for the hispanic enlistees. The eigenvalue of job characteristic was 6.359 and explaining 35.3% of the total variance in the variables. The eigenvalue of environment and benefits was 1.487, explains an additional 8.3% of the variance .

Table 8 is the factor matrix for the white male enlistees. Job characteristic and environment and benefits variable of the white enlistees is also almost the same as both job characteristic and environment and benefits of the black and hispanic enlistees. As for the black enlistees, satisfaction with current job, education benefits, medical care, dental care and commissary service variables are loaded moderately between job characteristic and environment and benefits. The differences are in the factor loadings and that co-workers variable loaded moderately between job characteristic and environment & benefits for the white, but loaded most heavily on job characteristic for the black enlistees. The eigenvalue of job characteristic of white was 5.394 and explaining 30% of the total variance. The eigenvalue of environment and benefits was 1.566 and explains an additional 8.7% of the variance.

2. **Satisfaction with living environments**

Six of the thirteen candidate variables under satisfaction with living environments were dropped because of too many missing values. These variables are :

housing, availability of civilian housing, availability of federal employ for spouse and availability of other civilian employ for spouse. Factor analysis was conducted on the remaining seven variables. The data was analyzed separately for the black, hispanic and white enlistees. These variables were reduced into two factors. Variables in factor 1 was called living conditions and variables in factor 2 was called health. These new variables will also be used as independent variables in the regression analysis.

Table 9, 10, and 11 show the results of the factor analysis for black, hispanic and white enlistees.

TABLE 9

FACTOR SCORE OF LIVING ENVIRONMENTS FOR BLACK MALE ENLISTEES

	Fac 1	Fac 2
VARIABLE	(Liv. cond.)	(Health)
Recreational centers	.725	
Goods & services avail.	.711	
Medical care of avail.	.661	.501
Distance to pop. center	.550	-.508
Residence climate	.545	-.322
Attitudes of locals	.528	
Medical care of quality	.491	.680

TABLE 10

FACTOR SCORE OF LIVING ENVIRONMENTS FOR HISP. MALE ENLISTEES

	Fac 1	Fac 2
VARIABLE	(Liv. cond.)	(Health)
Recreational centers	.770	
Goods & services avail.	.723	
Medical care of avail.	.636	.555
Distance to pop. center	.592	-.367
Residence climate	.614	
Attitudes of locals	.448	
Medical care of quality	.396	.791

TABLE 11

FACTOR SCORE OF LIVING ENVIRONMENTS FOR WHITE MALE ENLISTEES

VARIABLE	Fac 1 (Liv. cond.)	Fac 2 (Health)
Recreational centers	.762	
Goods & services avail.	.726	
Medical care of avail.	.633	.472
Distance to pop. center	.596	-.424
Residence climate	.550	-.418
Attitudes of locals	.435	
Medical care of quality	.394	.720

The eigenvalue for factor 1 (living conditions) of the black enlistees was 2.581 explaining 37% of the total variance (total variance in this case is seven because seven variables were included in the analysis). The eigenvalue for hispanic enlistees was 2.606 explaining 37.2% of the total variance, while the eigenvalue for factor 1 of the white enlistees was 2.511 explaining 35.9% of the total variance.

The eigenvalue for factor 2 (health) of the blacks was 1.121 which explains an additional 16% of the variance. For the hispanics, it was 1.199 which explains an additional 17.1% and for the whites it was 1.147 which explains an additional 16.4%.

C. REGRESSION ANALYSIS

Regression analysis was conducted with satisfaction with military life as the dependent variable and personal background and individual characteristic variables (age, where born, current education, marital status at entry, mother's and father's education, number of dependents, months of active duty, time at current location), working conditions variables (job characteristic, environment and benefits), living environments variables (living conditions and health) and expectations variables (life in military about what expected, military benefits in future and military benefits keep up with inflation) as independent variables as well as dummy variables for race and branch of service. Regression analysis was also conducted separately for the black, hispanic and white enlistees, and was also undertaken separately for the Army, Navy, Marine Corps and Air Force .

The results of the regression analysis indicated that not all of the independent variables had a significant effect on the determination of satisfaction with military life, and the effect of the dummy variables for branch of service varied by race.

TABLE 12
REGRESSION ANALYSIS RESULTS BY RACE

	ALL		BLACK		HISP		WHITE	
VARIABLE	BETA	sig.T	BETA	sig.T	BETA	sig.T	BETA	sig.T
Age	-.01		.04		-.04		-.01	
Where born	.01		.09	***	.01		.01	
Education	-.01		-.05		-.03		.01	
Months at loc.	-.01		-.02		.02		-.01	
Marital stat.	.01		.01		.01		.01	
Mother's educ.	.02	*	-.03		.02		.02	*
Father's educ.	.01		.04		.02		-.01	
Months of serv.	-.02	**	.03		-.05		-.03	**
Number of dep.	.04	***	.05	*	.03		.04	***
Life as expec.	-.23	***	-.19	***	-.27	***	-.22	***
Ret. benefit	-.01		-.01		.09	**	-.02	
Inflation	.06	***	.06	*	-.03		.06	***
Living cond.	-.03	***	-.01		-.04		-.03	***
Health	-.02	*	-.03		-.08	*	-.02	**
Job char.	-.49	***	-.51	***	-.51	***	-.48	***
Env. & benft.	-.24	***	-.22	***	-.28	***	-.24	***
Navy	-.06	***	-.09	***	-.14	***	-.04	***
Marine	-.02	*	-.02		-.08		-.02	
Air Force	.06	***	.06		-.02		.07	***
Black	.03	***						
Hispanic	.02	**						
No. of cases	6042		587		381		4886	
R SQUARE	.518		.492		.535		.523	

Note :
*** Significance level at .01
** Significance level at .05
* Significance level at .10

Tables 12 and 13 shows the Beta coefficients and their significance for the regression analyses for all races and branches of service, separately for the blacks, hispanics, whites, the Army, Navy, Marine Corps and Air Force. The Beta coefficients are the coefficient estimates from a regression in which the variables have been standardized, and can be interpreted as the change in the dependent variable measured in standard deviations, resulting from a one standard deviatiation change in the

TABLE 13

REGRESSION ANALYSIS RESULTS BY BRANCH OF SERVICE

	ARMY		NAVY		MAR.		A.F.	
VARIABLE	BETA	sig.T	BETA	sig.T	BETA	sig.T	BETA	sig.T
Age	-.01		-.01		-.01		.01	
Where born	.02		.01		.03		.01	
Education	-.01		.03		.01		-.02	
Months at loc.	.02		-.02		.01		-.02	
Marital stat.	.04		-.02		-.02		.01	
Mother's educ.	.02		-.01		.03		.03	*
Father's educ.	.01		.01		.01		-.02	
Months of serv.	.01		-.03		-.04	*	-.03	
Number of dep.	.06	***	.02		.03		.04	**
Life as expec.	-.21	***	-.26	***	-.23	***	-.21	***
Ret. benefit	-.02		-.01		.01		-.01	
Inflation	.08	***	.06	***	.05	***	.04	***
Living cond.	-.03		-.01		-.07	***	-.02	
Health	-.05	**	-.03		-.02		-.01	
Job char.	-.49	***	-.48	***	-.46	***	-.50	***
Env. & benft.	-.17	***	-.25	***	-.24	***	-.29	***
Black	.05	***	.01		.03	*	.02	
Hispanic	.05	***	-.01		.03		.01	
No. of cases	1351		1408		1470		1813	
R SQUARE	.502		.523		.497		.508	

Note :
*** Significance level at .01
** Significance level at .05
* Significance level at .1

independent variables. The Beta coefficient is a measure of the relative strength of the independent variables in affecting the dependent variable. [Ref. 29: p.90]

The results of those regression analyses indicate variables which are most important in determining job satisfaction and variables which less important in determining job satisfaction. The most important variables are those with large Beta coefficients and high levels of significance. The less important variables are those with smaller Beta's or those which are not statistically significant.

1. **The most important variables in affecting job satisfaction**

a. Life in military as expected

This variable had significantly (at .01 level) strong negative effect in determining job satisfaction for all models. Respondents were asked about life in military is about what their expected it to be. This variable was measured in five point

scale of agreement, 1 (strongly agree) to 5 (strongly disagree). This scale is on the opposite of satisfaction with military life's scale, which is why the relationships are negative meaning that the more strongly respondents disagree that life in the military is as expected to be, the lower their satisfaction with military life. The Beta coefficient was -.23 for all races, -.21 for Army, -.26 for Navy, -.23 for Marine Corps and -.21 for Air Force.

b. Job characteristics

Job characteristics is created from the factor 1 of the factor analysis of the working conditions variables. This variable significantly (at .01 level) indicated a strongly negative effect in determining job satisfaction for all models. Respondents were asked their feeling about working conditions. This variable was measured in five point scale of satisfaction, 1 (very satisfied) to 5 (very dissatisfied). This scale is on the opposite of satisfaction with military life's scale, which is why the relationships are negative, meaning that the more respondents feel dissatisfied with their job characteristics, the less they feel satisfied with military life. The Beta coefficient was -.49 for all races, -.49 for Army, -.48 for Navy, -.46 for Marine Corps and -.50 for Air Force.

c. Environment and benefits

Environment and benefits is created from factor 2 of the factor analysis of the working conditions variables. This variable significantly (at .01 level) indicated a strongly negative effect in determining job satisfaction for all models. This variable is measured on the opposite of satisfaction with military life's scale, which is why the relationships are negative, meaning that the more respondents feel dissatisfied with their environment and benefits, the less they feel satisfied with military life. The Beta coefficient was -.24 for all races, -.17 for Army, -.25 for Navy, -.24 for Marine Corps and -.29 for Air Force.

2. **The less important variables on determining job satisfaction.**

a. Mother's education

Mother's education significantly (at .10 level) contributed a slightly positive effect in determining job satisfaction for all races. The Beta coefficient was .02, which means a respondent with one standard deviation higher for his mother's education is .02 standard deviations more satisfied than others. This variable also significantly (at .10 level) indicated a slightly positive effect on determining job satisfaction for Air Force, but did not significantly contribute any effect on determining job satisfaction for Army, Navy, and Marine Corps.

b. Months of active duty

Months of active duty significantly (at .05 level) indicated a slightly negative effect in determining job satisfaction for all races. The Beta coefficient was -.02, which means that a respondent with one standard deviation longer on his active duty is .02 standard deviations less satisfied than others. This variable also significantly (at .10 level) indicated a slightly negative effect on determining job satisfaction for Marine Corps. The Beta coefficient was -.04. However, this variable did not significantly indicated any effect on determining job satisfaction for Army, Navy and Air Force.

c. Number of dependents

Number of dependents variable significantly (at .01 level) contributed positive effect in determining job satisfaction both for all races and Army. The Beta coefficient for all races was .04, which means a respondent with one more dependent is .04 degrees more satisfied than others. The Beta coefficient for Army was .06. This variable also significantly (at .05 level) indicated a slightly positive effect on determining job satisfaction for Air Force. The Beta coefficient was .04. This variable did not significantly indicated any effect on determining job satisfaction both for Navy and Marine Corps.

d. Military benefits in future will keep up with inflation

Military benefits in future will keep up with inflation significantly (at .01 level) indicated a slightly positive effect in determining job satisfaction both for all races and separately by branches of service, which means that the more military benefits in future is expected to keep up with inflation, the more respondents feel satisfied with military life. The Beta coefficient was .06 for all races, .08 for Army, .06 for Navy, .05 for Marine Corps and .04 for Air Force.

e. Living conditions

Living conditions is created from factor 1 of the factor analysis of living environment variables. This variable significantly (at .01 level) indicated a slightly negative effect in determining job satisfaction for all races and for Marine Corps. This variable is measured on the opposite of satisfaction with military life's scale, which is why the relationships are negative, meaning that the more respondents feel dissatisfied with their living conditions the less they satisfied with military life. The Beta coefficient was -.03 for all races and -.07 for Marine Corps. This variable did not significantly indicated any effect on determining job satisfaction for Army, Navy and Air Force.

f. Health

Health variable is created from factor 2 of the factor analysis of living environments variables. This variable significantly (at .10 level) indicated a slightly negative effect in determining job satisfaction for all races. This variable is measured on the opposite of satisfaction with military life's scale, which is why the relationships are negative, meaning that the more respondents feel dissatisfied with their health facilities on their living environments, the less they satisfied with satisfaction with military life. The Beta coefficient was .02. This variable also significantly (at .05 level) indicated a slightly negative effect on determining job satisfaction for Army, however this variable did not significantly indicated any effect on determining job satisfaction for Navy, Marine Corps and Air Force.

g. Branches of service

Using the Army as the base for the Branch of service dummy variable, the results significantly (at .01 level) indicated that Navy respondents feel slightly less satisfied than Army, the Beta coefficient was -.06. Marine Corps respondents significantly (at .1 level) indicated slightly less satisfied than respondents in the Army, the Beta coefficient was -.02 While Air Force respondents significantly (at .01 level) indicated a slightly higher level of satisfaction than respondents in the Army, the Beta coefficient was .06.

h. Races

Using Whites as the base for the race dummy variable, the results indicated that blacks had a significantly (at .01 level) higher level of satisfaction with military life than White respondents, the Beta coefficient was .03. While hispanics significantly (at .05 level) indicated a slightly higher level of satisfaction than White respondents, the Beta coefficient was .02.

3. **Test involving the equality of coefficient of the models**

Chow test were performed to test the equality of the regression coefficients of the models. Table 14 shows the results of the Chow tests for pairwise comparisons of the racial and branch of service groups.

The results of the Chow tests indicate that regression models for blacks, hispanics and whites are not significantly different from each other, which means that there isn't a need for separate models by race. However, the regression models for the Army, Navy, and Marines were significantly (at .05 level) different from each other, which means that separate regression models for each branch of service are appropriate.

TABLE 14

THE RESULTS OF THE CHOW TEST

Regression model		F value	sig.
Black	vs non-black	.908	
Hispanic	vs non-hisp.	.957	
White	vs non-white	1.004	
Army	vs non-Army	3.932	**
Navy	vs non-Navy	1.678	**
Marine	vs non-Marine	3.144	**
Air Force	vs non Air Force	.532	

Note ** = significance level at .05
* = significance level at .10

The reader should note the apparent contradiction that there are significant differences in mean satisfaction by race as presented in tables 1 and 12, but the results of the pairwise Chow tests on race indicate the absence of a need for separate models of satisfaction with military life for the three racial groups. These finding are the result of significant racial differences in the mean levels of job satisfaction, but multivariate models of job satisfaction that are similar in explaining variation around those mean levels of job satisfaction across racial groups.

IV. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

The effect of race on satisfaction with military life, and the factors considered determinants of job satisfaction were significant in all analyses conducted by this study. The bivariate analysis indicated that the average feeling of satisfaction with military life of the black and hispanic respondents were statistically higher than the white respondents. This result was supported by the regression analysis results. The regression analysis results also indicated that the black and hispanic respondents were significantly more satisfied with their military life than white respondents. The bivariate analysis also indicated that race was a significant main effect in the determination of job satisfaction. Finally, the regression analysis indicate that the models of job satisfaction do not vary by race, but do vary by branch of service.

The regression analysis results, both by all races and branches of service indicated that military life as expected, job characteristics, and the environment and benefits variables are the most important explanatory variables and had a strong influence in determining job satisfaction. The variables where born, mother's education, months of service, number of dependents, retirement benefits, military benefits will keep up with inflation, living conditions and health variables had a lesser effect in determining job satisfaction, and the significance of these variables varied by branches of service.

B. RECOMMENDATIONS

The job characteristics variable is created from factor 1 of the factor analysis of the working conditions variables. Personal freedom, assignment stability, job-training, satisfaction with current job and environmental conditions are the most heavily loaded variables in this factor. The military policy-makers should pay attention to those variables because the regression results indicated that job characteristics has the strongest effect in determining job satisfaction. An attempt to improve the respondents satisfaction on these variables should significantly improve their satisfaction with military life.

The environment and benefits variable is created from factor 2 of the factor analysis of the working conditions variables. Medical care, dental care and commissary service are the most heavily loaded variables in this factor. Military policy-makers

should pay attention to those variables because the regression results indicated that environment and benefits is the second most important influence on job satisfaction. An attempt to improve the respondents satisfaction on these variables will also significantly improve their satisfaction with military life.

The measure of satisfaction with military life in the survey was a single measure, which asked the respondents to rate his or her satisfaction with military life on a seven point scale. The use of single measure of satisfaction has questionable accuracy. The single one time measure of job satisfaction may actually be measuring an individual's mood at the time of the survey. It is quite possible that an individual who is normally very satisfied with his or her job would express a great deal of dissatisfaction if they were surveyed shortly after an unpleasant work related experience. Future research on the effect of race on job satisfaction in the military would be greatly enhanced by using a multiple measures of job satisfaction, which might provide a more accurate picture of the respondent's feelings.

The regression analysis results indicated that respondents in the Air Force were significantly more satisfied than their counterparts in the other branches of service. A study to determine what are the significant factors which resulted in a higher level of satisfaction for the Air Force personnel might be helpful to the other branches of the service.

The effect of different branch of service missions, equipment, organization and procedures could result in a great number of job characteristics not being consistenly measured across branches of service. Future research should attempt to study the effect of race in determining job satisfaction for a single branch of the military in order to get a more accurate estimate of the effect of race on job satisfaction in the military.

Further analysis is needed to explore the apparant interaction of race and branch of service with regard to satisfaction with military life. Separate model of job satisfaction by branch of service and by race should be estimated and tests of model similarity conducted to explore the stability of such models of job satisfaction.

APPENDIX A

THE REGRESSION RESULTS FOR ALL RACES AND BRANCHES OF SERVICE

MULTIPLE R	.71948	ANALYSIS OF VARIANCE			
R SQUARE	.51765		DF	SUM OF SQ.	MEAN SQUARE
ADJUS.R SQ.	.51597	REGRESS.	21	9220.45314	439.06920
STAND.ERROR	1.19464	RESIDUAL	6020	8591.56556	1.42717

F = 307.65017 SIGNIF F = .0000

---------- VARIABLES IN THE EQUATION ----------

VARIABLE	B	SE B	BETA	T	SIG T
0108104C	.099365	.017209	.055706	5.774	.0000
HISP	.138430	.066133	.019597	2.093	.0364
E42	-.006064	.017134	-.003700	-.354	.7234
NAVY	-.226226	.047040	-.055703	-4.809	.0000
013E12	-.001227	.001680	-.007467	-.730	.4652
0108104A	-.361531	.016381	-.225044	-22.070	.0000
050E47	.009019	.029302	.003135	.308	.7582
BLACK	.159824	.053391	.027568	2.993	.0028
049E46B	.001021	.006040	.001749	.169	.8657
LIVING COND.	-.053900	.016789	-.031351	-3.210	.0013
HEALTH	-.034038	.018088	-.019747	-1.882	.0599
037E36	.035166	.074146	.004392	.474	.6353
0108104B	-.015863	.016566	-.009017	-.958	.3383
067E64	.099752	.023514	.041659	4.242	.0000
MARINE	-.088156	.046257	-.022030	-1.906	.0567
06E6	-.003534	.001544	-.023921	-2.290	.0221
049E46A	.014704	.007922	.019246	1.856	.0635
JOBCHAR	-.841681	.018793	-.485829	-44.787	.0000
ENV & BENFT.	-.403655	.018579	-.235601	-21.726	.0000
036E35	-.002181	.008012	-.003180	-.272	.7854
AIRFORCE	.218126	.044743	.058221	4.875	.0000
(CONSTANT)	4.763815	.245948		19.369	.0000

TOTAL CASES = 6042

APPENDIX B
THE REGRESSION RESULTS FOR THE BLACKS

MULTIPLE R	.70166	ANALYSIS OF VARIANCE			
R SQUARE	.49233		DF	SUM OF SQUARES	MEAN SQUARE
ADJUS.R SQ.	.47531	REGRESS.	19	754.70862	39.72151
STAND.ERROR	1.17156	RESIDUAL	567	778.23857	1.37255

F = 28.93983 SIGNIF F = .0000

---------- VARIABLES IN THE EQUATION ----------

VARIABLE	B	SE B	BETA	T	SIG T
0108104C	.091880	.049946	.059142	1.840	.0664
MARINE	-.071146	.134694	-.018987	-.528	.5976
049E46A	-.018646	.024438	-.026427	-.763	.4458
0108104A	-.276960	.049996	-.187725	-5.540	.0000
06E6	.003760	.004621	.026579	.814	.4162
037E36	.870134	.301234	.087676	2.889	.0040
067E64	.110611	.067321	.054533	1.643	.1009
LIVING COND.	-.023661	.053841	-.014293	-.439	.6605
E42	-.072075	.052378	-.052126	-1.376	.1693
HEALTH	-.045391	.058617	-.026435	-.774	.4390
0108104B	-.018039	.046925	-.012115	-.384	.7008
NAVY	-.387089	.150614	-.090761	-2.570	.0104
013E12	-.002554	.004679	-.017834	-.546	.5854
050E47	.011873	.181107	.002192	.066	.9478
049E46B	.020823	.019828	.035819	1.050	.2941
ENV & BENFT.	-.386624	.060812	-.223743	-6.358	.0000
JOBCHAR	-.840223	.058965	-.510472	-14.249	.0000
AIRFORCE	.203477	.132365	.056391	1.537	.1248
036E35	.028512	.026710	.042909	1.067	.2862
(CONSTANT)	4.023905	.772640		5.208	.0000

TOTAL CASES = 587

APPENDIX C
THE REGRESSION RESULT FOR NON-BLACKS

MULTIPLE R	.72195	ANALYSIS OF VARIANCE			
R SQUARE	.52122		DF	SUM OF SQ.	MEAN SQUARE
ADJUS.R SQ.	.51954	REGRESS.	19	8477.5605	446.1874
STAND.ERROR	1.19701	RESIDUAL	5435	7787.3864	1.4328

F = 311.40467 SIGNIF F = .0000

VARIABLES IN THE EQUATION

VARIABLE	B	SE B	BETA	T	SIG T
0108104C	.098584	.018353	.054433	5.371	.0000
049E46B	-.002312	.006354	-.003951	-.364	.7160
037E36	-.048680	.074582	-.006179	-.653	.5140
NAVY	-.208775	.049727	-.051594	-4.198	.0000
013E12	-9.88759E-04	.001804	-.005926	-.548	.5836
050E47	.012602	.029916	.004522	.421	.6736
0108104A	-.369442	.017351	-.227893	-21.292	.0000
E42	.001936	.018207	.001157	.106	.9153
LIVING COND.	-.054347	.017748	-.031445	-3.062	.0022
HEALTH	-.030762	.019030	-.017792	-1.616	.1060
0108104B	-.014348	.017704	-.007996	-.810	.4177
067E64	.100968	.025142	.041268	4.016	.0001
MARINE	-.086047	.049323	-.021369	-1.745	.0811
06E6	-.004203	.001643	-.028332	-2.558	.0105
049E46A	.018020	.008351	.023402	2.158	.0310
JOBCHAR	-.837825	.019790	-.482149	-42.335	.0000
ENV & BENFT.	-.415440	.019521	-.241401	-21.281	.0000
036E35	-.005440	.008409	-.007910	-.647	.5177
AIRFORCE	.220535	.047584	.058664	4.635	.0000
(CONSTANT)	4.855538	.259566		18.706	.0000

TOTAL CASES = 5455

APPENDIX D
THE REGRESSION RESULTS FOR THE HISPANICS

MULTIPLE R	.73113	ANALYSIS OF VARIANCE			
R SQUARE	.53455		DF	SUM OF SQ.	MEAN SQUARE
ADJUS.R SQ.	.51006	REGRESS.	19	645.53876	33.97572
STAND.ERROR	1.24781	RESIDUAL	361	562.08329	1.55702

F = 21.82103 SIGNIF F = .0000

---------- VARIABLES IN THE EQUATION ----------

VARIABLE	B	SE B	BETA	T	SIG T
0108104C	-.052477	.073229	-.029099	-.717	.4741
013E12	.003894	.007184	.022462	.542	.5881
NAVY	-.579978	.186419	-.144240	-3.111	.0020
E42	-.039543	.065831	-.026077	-.601	.5484
0108104A	-.420303	.066767	-.268645	-6.295	.0000
049E46B	.008953	.023571	.016874	.380	.7043
037E36	.043739	.156848	.010514	.279	.7805
050E47	.033601	.111131	.012520	.302	.7626
HEALTH	.150374	.080530	.079316	1.867	.0627
LIVING COND.	.084561	.078510	.044772	1.077	.2822
0108104B	.155094	.068954	.087882	2.249	.0251
AIRFORCE	-.074637	.198756	-.016996	-.376	.7075
067E64	.067370	.079592	.034955	.846	.3979
06E6	-.007222	.006358	-.047325	-1.136	.2567
ENV & BENFT.	-.479967	.077135	-.277584	-6.222	.0000
049E46A	.011311	.026404	.019262	.428	.6686
JOBCHAR	-.889102	.080506	-.505232	-11.044	.0000
MARINE	-.303156	.186500	-.075627	-1.626	.1049
036E35	-.026036	.032600	-.039746	-.799	.4250
(CONSTANT)	6.052187	.844192		7.169	.0000

NUMBER OF CASES = 381

APPENDIX E
REGRESSION RESULT FOR NON-HISPANICS

MULTIPLE R	.71977	ANALYSIS OF VARIANCE			
R SQUARE	.51807		DF	SUM OF SQ.	MEAN SQUARE
ADJUST. R SQ.	.51644	REGRESS.	19	8602.1016	452.74219
STAND. ERROR	1.19104	RESIDUAL	5641	8002.1520	1.41857

F = 319.15399 SIGNIF F = .0000

VARIABLES IN THE EQUATION

VARIABLE	B	SE B	BETA	T	SIG T
0108104C	.107727	.017714	.060440	6.081	.0000
037E36	.036230	.086189	.003905	.420	.6742
049E46A	.015290	.008348	.019324	1.832	.0671
NAVY	-.205752	.048658	-.050612	-4.229	.0000
0108104A	-.355952	.016905	-.221088	-21.056	.0000
013E12	-.001402	.001729	-.008560	-.811	.4175
050E47	-.001575	.030393	-5.446E-04	-.052	.9587
E42	.003254	.017727	.001973	.184	.8543
LIVING COND.	-.057151	.017139	-.033487	-3.334	.0009
HEALTH	-.046656	.018639	-.027171	-2.503	.0123
0108104B	-.021971	.017110	-.012482	-1.284	.1992
067E64	.113999	.024583	.046574	4.637	.0000
MARINE	-.074237	.047807	-.018551	-1.553	.1205
06E6	-.003265	.001593	-.022147	-2.050	.0404
049E46B	-9.00177E-04	.006234	-.001526	-.144	.8852
JOBCHAR	-.836016	.019307	-.483518	-43.301	.0000
ENV & BENFT.	-.406944	.019083	-.237674	-21.325	.0000
036E35	-.002717	.008274	-.003947	-.328	.7427
AIRFORCE	.230089	.045940	.061929	5.008	.0000
(CONSTANT)	4.652947	.260315		17.874	.0000

NUMBER OF CASES = 5661

APPENDIX F
THE REGRESSION RESULTS FOR THE WHITES

MULTIPLE R	.72349	ANALYSIS OF VARIANCE			
R SQUARE	.52344		DF	SUM OF SQ.	MEAN SQUARE
ADJUS.R SQ.	.52158	REGRESS.	19	7574.21367	398.64282
STAND.ERROR	1.19043	RESIDUAL	4866	6895.76587	1.41713

F = 281.30247 SIGNIF F = .0000

---------- VARIABLES IN THE EQUATION ----------

VARIABLE	B	SE B	BETA	T	SIG T
0108104C	.114071	.019332	.062929	5.901	.0000
049E46B	-.001705	.006737	-.002876	-.253	.8002
NAVY	-.177455	.052695	-.043876	-3.368	.0008
037E36	.040166	.108173	.003685	.371	.7104
013E12	-.001915	.001896	-.011505	-1.010	.3124
050E47	.008348	.031905	.002990	.262	.7936
0108104A	-.366402	.018327	-.224412	-19.992	.0000
E42	.007940	.019726	.004631	.402	.6873
LIVING COND.	-.053984	.018482	-.031494	-2.921	.0035
HEALTH	-.041206	.020031	-.023906	-2.057	.0397
0108104B	-.029576	.018773	-.016394	-1.575	.1152
067E64	.102937	.027366	.040672	3.761	.0002
MARINE	-.060984	.052148	-.015163	-1.169	.2423
049E46A	.017431	.009207	.021402	1.893	.0584
06E6	-.003900	.001731	-.026395	-2.253	.0243
JOBCHAR	-.831575	.020577	-.482111	-40.413	.0000
ENV & BENFT.	-.403622	.020541	-.235392	-19.649	.0000
036E35	-.003452	.009201	-.004872	-.375	.7076
AIRFORCE	.255042	.050100	.068584	5.091	.0000
(CONSTANT)	4.632010	.288475		16.057	.0000

NUMBER OF CASES = 4886

APPENDIX G
REGRESSION RESULT FOR NON-WHITES

MULTIPLE R	.70734		ANALYSIS OF VARIANCE		
R SQUARE	.50033		DF	SUM OF SQ.	MEAN SQUARE
ADJUS.R SQ.	.49197	REGRESS.	19	1669.3252	87.85923
STAND.ERROR	1.21142	RESIDUAL	1136	1667.12713	1.46754

F = 59.86831 SIGNIF F = .0000

VARIABLES IN THE EQUATION

VARIABLE	B	SE B	BETA	T	SIG T
0108104C	.047347	.037953	.028312	1.248	.2125
037E36	.067095	.104434	.013884	.642	.5207
MARINE	-.171552	.100894	-.043826	-1.700	.0893
049E46B	.006680	.013784	.011951	.485	.6280
013E12	.001473	.003669	.009421	.401	.6883
0108104A	-.346192	.036794	-.229269	-9.409	.0000
050E47	.006860	.077814	.002038	.088	.9298
E42	-.041288	.035116	-.029336	-1.176	.2399
LIVING COND.	-.040418	.040554	-.023163	-.997	.3191
HEALTH	.008697	.042757	.004920	.203	.8388
0108104B	.037230	.035507	.023119	1.049	.2946
NAVY	-.401321	.105337	-.096970	-3.810	.0001
067E64	.097595	.046636	.048461	2.093	.0366
06E6	-.001345	.003471	-.009108	-.387	.6986
ENV & BENFT.	-.428698	.043093	-.247868	-9.948	.0000
049E46A	.007943	.015598	.012747	.509	.6107
JOBCHAR	-.845851	.044477	-.493124	-19.018	.0000
AIRFORCE	.067255	.101265	.017259	.664	.5067
036E35	-.001378	.016507	-.002267	-.083	.9335
(CONSTANT)	5.192823	.494328		10.505	.0000

NUMBER OF CASES = 1156

APPENDIX H
REGRESSION RESULT FOR ARMY

MULTIPLE R	.70878	ANALYSIS OF VARIANCE			
R SQUARE	.50238		DF	SUM OF SQ.	MEAN SQUARE
ADJ.R SQUARE	.49565	REGRESS.	18	2100.9693	116.7205
STAND.ERROR	1.24996	RESIDUAL	1332	2081.1031	1.5623
	F =	74.70640	SIGNIF F = .0000		

VARIABLES IN THE EQUATION

VARIABLE	B	SE B	BETA	T	SIG T
0108104C	.141303	.038169	.077719	3.702	.0002
049E46B	.008429	.013236	.014479	.637	.5243
037E36	-.114421	.155035	-.015077	-.738	.4606
013E12	.004208	.004690	.019489	.897	.3698
BLACK	.257844	.105252	.049449	2.450	.0144
050E47	.098747	.061657	.036372	1.602	.1095
0108104A	-.336509	.035573	-.209426	-9.460	.0000
LIVING COND.	-.047564	.037203	-.027256	-1.279	.2013
E42	-.022521	.036658	-.014077	-.614	.5391
HEALTH	-.094573	.040917	-.053667	-2.311	.0210
0108104B	-.043891	.036581	-.024173	-1.200	.2304
HISP	.361680	.140936	.053068	2.566	.0104
06E6	4.73307E-04	.003556	.002932	.133	.8941
067E64	.131295	.050059	.060187	2.623	.0088
049E46A	.012674	.017060	.016981	.743	.4577
ENV & BENFT.	-.292993	.041955	-.165670	-6.983	.0000
JOBCHAR	-.854957	.041472	-.490808	-20.615	.0000
036E35	-.007999	.015479	-.013470	-.517	.6054
(CONSTANT)	4.561893	.518295		8.802	.0000

NUMBER OF CASES = 1351

APPENDIX I
THE REGRESSION RESULTS FOR NON ARMY

MULTIPLE R	.71537	ANALYSIS OF VARIANCE			
R SQUARE	.51175		DF	SUM OF SQ.	MEAN SQUARE
ADJUS.R SQ.	.50987	REGRESS.	18	6943.3608	385.74227
STAND.ERROR	1.19076	RESIDUAL	4672	6624.4869	1.41791

F = 272.04943 SIGNIF F = .0000

VARIABLES IN THE EQUATION

VARIABLE	B	SE B	BETA	T	SIG T
0108104C	.080719	.019442	.045569	4.152	.0000
037E36	.087936	.085564	.010813	1.028	.3041
049E46B	-.002942	.006862	-.005045	-.429	.6681
013E12	-7.07134E-04	.001807	-.004554	-.391	.6956
050E47	-.011035	.033699	-.003763	-.327	.7433
LIVING COND.	-.021419	.018475	-.012543	-1.159	.2464
BLACK	.126238	.062973	.020964	2.005	.0451
0108104A	-.376418	.018629	-.234262	-20.206	.0000
E42	.028086	.019454	.017043	1.444	.1489
HISP	.006923	.075716	9.708E-04	.091	.9272
HEALTH	-.021453	.020358	-.012567	-1.054	.2920
0108104B	-.026898	.018615	-.015452	-1.445	.1485
067E64	.092112	.027107	.037214	3.398	.0007
ENV & BENFT.	-.411224	.037214	-.224762	-10.114	.0000
06E6	-.004646	.001734	-.032015	-2.680	.0074
049E46A	.014543	.009051	.018935	1.607	.1082
JOBCHAR	-.854819	.020998	-.493975	-40.709	.0000
036E35	-.004990	.009534	-.006907	-.523	.6007
(CONSTANT)	4.611519	.280125		16.462	.0000

NUMBER OF CASES = 4691

APPENDIX J
THE REGRESSION RESULTS FOR THE NAVY

MULTIPLE R	.72351	ANALYSIS OF VARIANCE			
R SQUARE	.52347		DF	SUM OF SQ.	MEAN SQUARE
ADJUS.R SQ.	.51730	REGRESS.	18	2083.57541	115.75419
STAND.ERROR	1.16856	RESIDUAL	1389	1896.73069	1.36554

F = 84.76826 SIGNIF F = .0000

VARIABLES IN THE EQUATION

VARIABLE	B	SE B	BETA	T	SIG T
0108104C	.107732	.035166	.060951	3.064	.0022
049E46A	.002454	.015423	.003311	.159	.8736
050E47	-.052486	.053815	-.021130	-.975	.3296
06E6	-.004258	.002976	-.030015	-1.431	.1527
BLACK	.009630	.123713	.001485	.078	.9380
037E36	.093868	.153216	.011801	.613	.5402
JOBCHAR	-.824921	.038389	-.475136	-21.489	.0000
HEALTH	-.042065	.037179	-.025084	-1.131	.2581
E42	.044367	.035142	.027742	1.263	.2070
HISP	-.036332	.125136	-.005601	-.290	.7716
LIVING COND.	-.017464	.033160	-.010360	-.527	.5985
0108104B	-.025207	.032778	-.014917	-.769	.4420
067E64	.058350	.046697	.024534	1.250	.2117
049E46B	.007154	.011885	.012415	.602	.5473
013E12	-.003764	.003194	-.024844	-1.179	.2388
0108104A	-.412776	.033993	-.259324	-12.143	.0000
ENV & BENFT.	-.423116	.038399	-.253848	-11.019	.0000
036E35	-.007412	.015401	-.011921	-.481	.6304
(CONSTANT)	4.399074	.488055		9.013	.0000

NUMBER OF CASES = 1408

APPENDIX K
THE REGRESSION RESULTS FOR NON-NAVY

MULTIPLE R	.71339	ANALYSIS OF VARIANCE			
R SQUARE	.50893		DF	SUM OF SQ.	MEAN SQUARE
ADJUS.R SQ.	.50701	REGRESS.	18	6988.3741	388.24301
STAND.ERROR	1.20877	RESIDUAL	4615	6743.1390	1.46114

F = 265.71326 SIGNIF F = .0000

VARIABLES IN THE EQUATION

VARIABLE	B	SE B	BETA	T	SIG T
0108104C	.090145	.019799	.050564	4.553	.0000
049E46B	-.001770	.007061	-.003031	-.251	.8020
037E36	.028183	.085419	.003526	.330	.7415
013E12	.001003	.001983	.005961	.506	.6129
0108104A	-.353600	.018792	-.220309	-18.817	.0000
BLACK	.178329	.059623	.031712	2.991	.0028
050E47	.038347	.035301	.012705	1.086	.2774
LIVING COND.	-.051820	.019173	-.030077	-2.703	.0069
E42	-.003788	.019656	-.002302	-.193	.8472
HEALTH	-.035595	.020704	-.020552	-1.719	.0856
HISP	.168142	.078173	.023235	2.151	.0315
0108104B	-.028724	.019142	-.016186	-1.501	.1335
067E64	.106991	.027466	.044735	3.895	.0001
06E6	-.003298	.001810	-.022106	-1.823	.0684
ENV & BENFT.	-.400131	.021292	-.232563	-18.793	.0000
049E46A	.018380	.009303	.023917	1.976	.0482
JOBCHAR	-.864774	.021452	-.501220	-40.312	.0000
036E35	.001969	.009421	.002784	.209	.8345
(CONSTANT)	4.641789	.283334		16.383	.0000

NUMBER OF CASES = 4634

APPENDIX L
THE REGRESSION RESULT FOR MARINE

MULTIPLE R	.70491	ANALYSIS OF VARIANCE			
R SQUARE	.49689		DF	SUM OF SQ.	MEAN SQUARE
ADJUS.R SQ.	.49065	REGRESS.	18	2185.3114	121.40619
STAND.ERROR	1.23487	RESIDUAL	1451	2212.6347	1.52490

F = 79.61566 SIGNIF F = .0000

VARIABLES IN THE EQUATION

VARIABLE	B	SE B	BETA	T	SIG T
0108104C	.085002	.034338	.049908	2.475	.0134
BLACK	.195518	.110085	.033705	1.776	.0759
013E12	.001941	.003464	.012011	.560	.5754
049E46A	.019080	.016925	.025097	1.127	.2598
050E47	-.059871	.072014	-.016297	-.831	.4059
LIVING COND.	-.116221	.034879	-.066509	-3.332	.0009
037E36	.213571	.168534	.025008	1.267	.2053
E42	.005294	.042635	.002598	.124	.9012
0108104A	-.363427	.033385	-.232436	-10.886	.0000
067E64	.075301	.051740	.028199	1.455	.1458
HEALTH	-.031609	.037290	-.018312	-.848	.3968
0108104B	.016171	.035800	.008833	.452	.6516
HISP	.173267	.135192	.025570	1.282	.2002
06E6	-.006557	.003358	-.043608	-1.952	.0511
ENV & BENFT.	-.413141	.039178	-.237442	-10.545	.0000
049E46B	.001698	.012573	.002985	.135	.8926
036E35	-.001306	.020755	-.001421	-.063	.9498
JOBCHAR	-.812556	.039497	-.464807	-20.573	.0000
(CONSTANT)	4.326794	.596841		7.249	.0000

NUMBER OF CASES = 1470

APPENDIX M
THE REGRESSION RESULTS FOR NON-MARINE

MULTIPLE R	.70665	ANALYSIS OF VARIANCE			
R SQUARE	.49936		DF	SUM OF SQ.	MEAN SQUARE
ADJUS.R SQ.	.49722	REGRESS.	18	6273.74909	348.54162
STAND.ERROR	1.22230	RESIDUAL	4210	6289.85886	1.49403

F = 233.28985 SIGNIF F = .0000

VARIABLES IN THE EQUATION

VARIABLE	B	SE B	BETA	T	SIG T
0108104C	.112704	.020641	.064143	5.460	.0000
E42	.007758	.021817	.004527	.356	.7222
HISP	.165388	.077039	.024709	2.147	.0319
06E6	-.003884	.001879	-.025962	-2.067	.0388
050E47	.006851	.035218	.002410	.195	.8458
0108104A	-.370773	.019826	-.233897	-18.701	.0000
BLACK	.190969	.064394	.033277	2.966	.0030
LIVING COND.	-.044196	.020266	-.025605	-2.181	.0292
049E46B	.006264	.007235	.010888	.866	.3866
HEALTH	-.040450	.022009	-.023504	-1.838	.0662
0108104B	-.020167	.020168	-.011381	-1.000	.3174
037E36	.038625	.091395	.004824	.423	.6726
067E64	.112264	.028153	.047197	3.988	.0001
013E12	-9.30242E-04	.002102	-.005483	-.443	.6581
049E46A	.008665	.009478	.011566	.914	.3606
ENV & BENFT.	-.393092	.022767	-.228071	-17.266	.0000
JOBCHAR	-.832005	.022971	-.478718	-36.219	.0000
036E35	-.006487	.009520	-.009683	-.681	.4957
(CONSTANT)	4.515182	.301648		14.968	.0000

NUMBER OF CASES = 4572

APPENDIX N
THE REGRESSION RESULTS FOR THE AIR FORCE

MULTIPLE R	.71248	ANALYSIS OF VARIANCE			
R SQUARE	.50762		DF	SUM OF SQ.	MEAN SQUARE
ADJUS.R SQ.	.50268	REGRESS.	18	2388.69690	132.70538
STAND.ERROR	1.13645	RESIDUAL	1794	2316.97437	1.29151

F = 102.75187 SIGNIF F = .0000

VARIABLES IN THE EQUATION

VARIABLE	B	SE B	BETA	T	SIG T
0108104C	.076378	.031416	.043259	2.431	.0151
E42	-.022003	.027737	-.015198	-.793	.4277
037E36	.026931	.127368	.003553	.211	.8326
013E12	-.002870	.002788	-.019546	-1.029	.3035
049E46A	.026315	.014614	.034589	1.801	.0719
LIVING COND.	-.038601	.029128	-.023861	-1.325	.1853
BLACK	.121206	.095823	.021520	1.265	.2061
050E47	.042122	.053538	.014987	.787	.4315
HEALTH	.007468	.030986	.004579	.241	.8096
HISP	.029798	.133604	.003776	.223	.8235
0108104B	-.004515	.029091	-.002661	-.155	.8767
0108104A	-.339993	.029379	-.210903	-11.573	.0000
067E64	.087940	.042932	.038111	2.048	.0407
JOBCHAR	-.799633	.031199	-.497226	-25.630	.0000
06E6	-.003613	.002707	-.026394	-1.334	.1822
049E46B	-.013968	.011080	-.024354	-1.261	.2076
ENV & BENFT.	-.470030	.031959	-.293572	-14.707	.0000
036E35	.003622	.014956	.005193	.242	.8087
(CONSTANT)	5.274727	.421664		12.509	.0000

NUMBER OF CASES = 1813

APPENDIX O
THE REGRESSION RESULTS FOR NON-AIR FORCE

MULTIPLE R	.70665	ANALYSIS OF VARIANCE			
R SQUARE	.49936		DF	SUM OF SQ.	MEAN SQUARE
ADJUS.R SQ.	.49722	REGRESS.	18	6273.7490	348.54162
STAND.ERROR	1.22230	RESIDUAL	4210	6289.8588	1.49403

F = 233.28985 SIGNIF F = .0000

VARIABLES IN THE EQUATION

VARIABLE	B	SE B	BETA	T	SIG T
O108104C	.112704	.020641	.064143	5.460	.0000
E42	.007758	.021817	.004527	.356	.7222
HISP	.165388	.077039	.024709	2.147	.0319
O6E6	-.003884	.001879	-.025962	-2.067	.0388
O50E47	.006851	.035218	.002410	.195	.8458
O108104A	-.370773	.019826	-.233897	-18.701	.0000
BLACK	.190969	.064394	.033277	2.966	.0030
LIVING COND.	-.044196	.020266	-.025605	-2.181	.0292
O49E46B	.006264	.007235	.010888	.866	.3866
HEALTH	-.040450	.022009	-.023504	-1.838	.0662
O108104B	-.020167	.020168	-.011381	-1.000	.3174
O37E36	.038625	.091395	.004824	.423	.6726
O67E64	.112264	.028153	.047197	3.988	.0001
O13E12	-9.30242E-04	.002102	-.005483	-.443	.6581
O49E46A	.008665	.009478	.011566	.914	.3606
ENV & BENFT.	-.393092	.022767	-.228071	-17.266	.0000
JOBCHAR	-.832005	.022971	-.478718	-36.219	.0000
O36E35	-.006487	.009520	-.009683	-.681	.4957
(CONSTANT)	4.515182	.301648		14.968	.0000

NUMBER OF CASES = 4229

LIST OF REFERENCES

1. Gruneberg, Michael M., *Understanding Job Satisfaction*, John Wiley & Sons, 1979.

2. Muchinsky, *Psychology Applied To Work : An Introduction to Industrial and Organizational psychology*, Iowa State University, 1983.

3. Locke, E. A., *What is Job Satisfaction* ?, Organizational Behavior and Human Performance, 1969, v. 4, 309-336

4. Reed, Philip L. and Reddon, John R., *Human Needs and Job Satisfaction : A Multidimensional Approach*, Human Relations, V. 35, no. 9, 1982.

5. Charles L. Hulin, *Effects of Changes in Job Satisfaction Levels on Employee Turnover*, Journal of Applied Psychology, 1968, V. 52, no. 2, 122-126

6. Salancik, G. R. and Pfeffer, J., *An Examination of Need Satisfaction Models of Job Satisfaction*, Administrative Science Quarterly, 1977, V. 22, 427-456

7. Weiss, H. M. and Shaw, J. B., *Social Influences on Judgements about tasks*, Organizational Behavior and Human Performance, 1979, V. 24, 126-140

8. Frank, J. Landy, *An Opponent Process Theory of Job Satisfaction*, Journal of Applied Psychology, V. 63, no. 5, 533-547

9. Mobley, W. H. *Intermediate linkages in the relationship between job satisfaction and employee turnover*, Journal of Applied Psychology, 1977, 62, 237-240.

10. Horner, S. O., Mobley, W. H., and Hollingsworth, A. T. *An evaluation of precursors of hospital employee turnover*, Journal of Applied Psychology, 1978, 63, 408-414.

11. Kunin, T. *The construction of a new type of altitude measure*, Personnel Psychology, 1955, 8, 65-77.

12. Rice, R. W., Near, J. P., and Hunt, R. G. *Work and extra-work correlates of life and job satisfaction*, Academy of Management Journal, 1978, 21, 248-264.

13. Neal Schmitt and Arthur G. Bedeian , *A Comparison of LISREL and Two-stage Least-squares Analysis of a Hypothesized Life-Job Satisfaction Reciprocal Relationship*, Journal of Applied Psychology, V-67, no. 6, 806-817

14. Christopher Orpen, *Work and Non-work Satisfaction : A Causal Correlational Analysis*, Journal of Applied Psychology, 1978, V. 63, no. 4, 530-532

15. Moch. Michael K., *Racial differences in Job Satisfaction : Testing for Common Explanations*, Journal of Applied Psychology, V-65, no. 3, 1980

16. Jones, Allen P., James, Lawrence R., Bruni, John R. and Sells, S.B., *Black-White Differences in Work Environment Perceptions and Job Satisfaction and Its Correlates*, Personnel Psychology, V. 30, 1977

17. Bartel, Ann P. *Race Differences in Job Satisfaction : A Reappraisal*, The Journal of Human Resources, XV1 2, 1981.

18. Andrisani, J. P. and Shapiro, M. B. *Woman's attitudes toward their job : Some longitudinal data on national sample*, Personnel Psychology, 1978, 31, 15-34.

19. Porter, L. and Steers R.. *Motivation and Work Behavior*, McGraw Hill, Inc. New York, 1983.

20. Mowday, R., Porter, L. and Steers, R., *Employee-organization and Linkages*, Academic Press Inc., New York, N. Y., 1982.

21. *1985 DoD Survey of Officer and Enlisted Personnel*, User's Manual and Code Book, prepared by Research Triangle Institute and Defense Manpower Data Center, June 27, 1986.

22. John T. Hazer, and Larry J. William, *Antecedents and Consequences of Satisfaction and Commitment in Turnover Models : A reanalysis using latent variable structural equation methods*, Journal of Applied Psychology, V. 71, no. 2, 1986.

23. O'Reilly 111, Charles A. and Caldwell, David F., Job Choice : *The Impact of Intrinsic and Extrinsic Factors on Subsequent Satisfaction and Commitment*, Journal of Applied Psychology, V. 65, no. 5, 1980.

24. Zeitz, Gerald, *Structural and Individual Determinants of Organization Morale and Satisfaction*, Social Forces, V. 61, no. 4, 1983.

25. Brian T. Coher, Nancy L. Muller, and Michael P. Fitsgerald, *A Meta-Analysis of The Relation of Job characteristic to Job Satisfaction*, Journal of Applied Psychology, V. 70, no. 2, 1985.

26. Garry J. Blauw, *Relation-ship of Extrinsic, Intrinsic, and Demographic Predictions to Various Types of Withdrawal Behaviors*, Journal of Applied Psychology, V. 70, no. 3, 1985.

27. Hughes, Harriette, *Job Satisfaction in Industry and in the Military*, Office of the Assistant Secretary of Defense (Manpower and Reserve Affair), September 1973.

28. *SPSSX Inc.*, *SPSSX User's Guide*, McGraw-hill Book Company, New York, N.Y., 1983.

29. Robert S. Pindyck and Daniel L. Rubinfeld, *Econometric Models and Economic Forecast*, McGraw-Hill Book Company, 1981

INITIAL DISTRIBUTION LIST

		No. Copies
1.	Defense Technical Information Center Cameron Station Alexandria, VA 22304-6145	2
2.	Library, Code 0142 Naval Postgraduate School Monterey, CA 93943-5002	2
3.	Defense Logistics Studies Information Exchange United States Army Logistics Management Centre Fort Lee, VA 23801	1
4.	Department Chairman, Code 54 Dept, of Administrative Sciences Naval Postgraduate School Monterey, CA 93943-5000	1
5.	Prof. George W. Thomas code 54TE Dept, of Administrative Sciences Naval Postgraduate School Monterey, CA 93943-5000	4
6.	Prof. Loren M. Solnick Code 54Sb Dept, of Administrative Sciences Naval Postgraduate School Monterey, CA 93943-5000	1
7.	Cdr. Ignatius Manggolo Srenal Mabes TNI-AL Cilangkap, Jakarta Selatan Indonesia	5